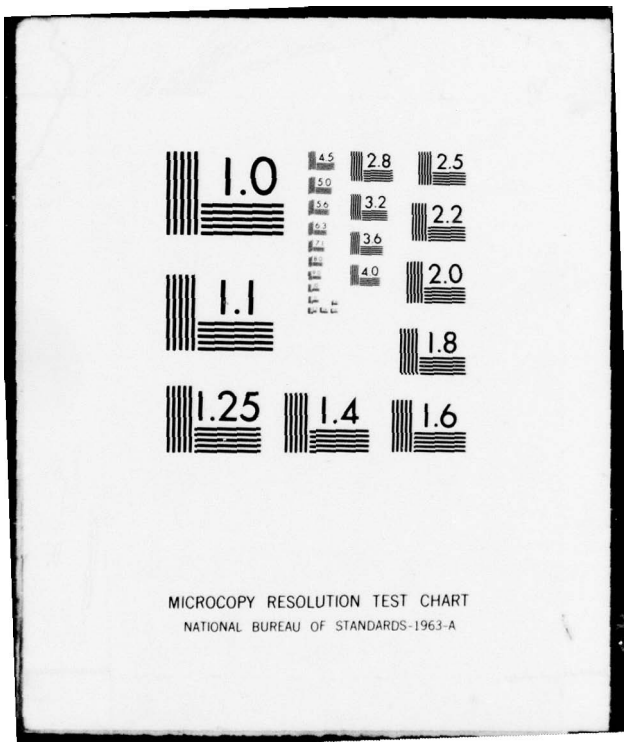
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PART I - METEOROLOGY

INTRODUCTION

The eight-volume series of the U.S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD has had wide acceptance as an authoritative reference for large scale operational planning and applied research. This volume, based on a little over 120 years of data (1854-1976), is an update of Volume IV (U.S. Navy *Marine Climatic Atlas of the World*, 1958), and is designed to fulfill the same requirements. This volume is not, however, a one-for-one revision. Some of the data presentations have been changed and wave statistics have been added. No upper air charts are presented since in recent years several comprehensive volumes of upper air data have been published separately (*Climate of the Upper Air: Southern Hemisphere*, Volume I, *Temperatures, Dew Points, and Heights at Selected Pressure Levels*, NAVAIR 50-1C-55, 1969; Volume II, *Zonal Geostrophic Winds*, NAVAIR 50-1C-56, 1971; Volume III, *Vector Mean Geostrophic Winds*, NAVAIR 50-1C-57, 1971; Volume IV, *Selected Meridional Cross Sections of Temperature, Dew Points, and Height*, NAVAIR 50-1C-58, 1971).

The descriptive explanations which follow give details concerning the quality control and processing of the observations and the development of the charts and graphs. Limitations imposed by the quality of the data and the methods adapted to help overcome them are also discussed.

This Atlas is the result of a concerted and extensive effort by many people (aided by modern data processing equipment) to present a detailed and useful ocean climatology.

THE GENERAL PLAN OF THE CHARTS

The "point statistics" common to land climatology are made possible by the maintenance of weather records at fixed locations for long periods. Such statistics are not generally available for Ocean Basins. In the past three decades the Ocean Weather Station (OWS) and, more recently, data buoy networks maintained through the cooperation of several maritime nations have been a real step toward fixed point locations. However, no ocean weather stations or buoys were available for the Southern Hemisphere. Transient ships' logs of surface weather observations are the only source of detailed knowledge of southern ocean climate.

It is sometimes possible to select areas small enough to permit an approximation to the "point statistics" of land stations where the number of observations is sufficient. For this atlas 45 representative areas were selected. These are outlined on the base chart and numbered. Graphs and Tables for these areas have been placed on the facing page for easy reference to the base chart. Unfortunately, many of the areas lack sufficient data for meaningful statistics for certain seasons.

THE OBSERVATIONS AND THEIR PROCESSING

Variations in definitions, codes and units of measurements used by maritime nations for recording and punching marine observations have resulted in over 20 different formats (or "decks") of magnetic tape data available for use at the National Climatic Center. These data have been converted to a common format. For a more detailed explanation of the conversion procedures, the reader is referred to the Tape Data Family-11 (TDF-11) Reference Manual (National Climatic Center, 1968). This tape deck was the primary data source for the Atlas projects. Funding for the development of TDF-11 was provided primarily by the Naval Weather Service Command with supplemental support from the Environmental Science Services Administration (now NOAA) and the Department of Defense.

The data were subjected to complex quality control procedures before processing. First, duplicate observations (which entered the data base from different sources) were eliminated. The remaining observations were then checked for internal consistency. Elements failing to meet the internal consistency checks were either adjusted or eliminated. The data were then subjected to an extreme value check. These quality controlled data have been retained in a separate tape file designated as the U.S. Navy Marine Atlas Work Tapes.

Regardless of the amount of quality control to which marine observations are subjected, there are many inherent problems which can be corrected in only a general way. Among these are the difficulty in taking observations of meteorological elements from an unstable platform, different levels of observer experience, recording errors, variations in observing and coding practices, punching errors, the scarcity of observations over vast areas, and the effect of weather elements themselves on measurements. Ships may avoid bad weather when possible (Quayle, 1974), thus decreasing the amount of bad-weather data; or they may slow down in foul weather, thus taking more observations and increasing the data sample.

Complete observations (including all elements) from transient ships are steadily becoming more common. Ships' weather logs of past decades, incomplete by today's standards, show wind direction and speed to be the elements almost invariably recorded. From a survey of the data available for this atlas, the percentage of observations containing basic weather elements is as follows:

Element	*Percent*
Wind	98
Air Temperature	96
Sea Temperature	91
Total Cloud Amount	90
Sea Level Pressure	59
Visibility	52
Present Weather	42
Wet Bulb Temperature	35
Low Cloud Amount	33
Waves	27

Because of incompatible observing or coding procedures, many elements had to be eliminated from the computations. This significantly reduced the percentages of the affected elements in the above table.

Some peculiarities of selected elements are listed below:

PRECIPITATION – This element is one of those most subject to error in interpretation. This derives from a number of causes such as coding practices, observers' preference for certain present weather codes and other biases.

SEA SURFACE TEMPERATURE – This element is recorded with a fairly high frequency in marine observations. The various methods of recording (bucket versus intake, etc.) have been combined for this Atlas. In data sparse regions, satellite data for the period 1973-1975 were used for guidance but were not included in the graphs. In addition, all data associated with oceanographic hydrocast and bathythermograph samples (expendable and otherwise) were included.

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SEA LEVEL PRESSURE – This element is one of the least accurate in an absolute sense because of instrument, coding and conversion errors. To be capable of registering accurate pressure readings, barometers used on shipboard generally require more frequent calibration than they receive. Despite the inaccuracies of the individual readings, however, the large scale patterns and gradients are relatively accurate.

AIR TEMPERATURE – This element is considered to be generally reliable. However, in the tropics, as the result of poor instrument exposure, observed temperatures on transient ships under sunny conditions appear consistently high. This data subset influences primarily the distribution of maximum temperatures (99th percentile) while the minimum (1st percentile) and mean temperatures are relatively unaffected.

VISIBILITY – It is difficult to measure visibility at sea because of the lack of reference points. Also, some observers report reduced visibilities at night because of darkness. The coarseness of the coding intervals, however, tends to minimize serious biases in the summarized data.

WAVE DATA – Suitable quantitative wave records are available only since the late 1940s. This, coupled with an apparent reluctance on the part of many observers to take wave observations, particularly in the early years, leaves waves as the least often recorded element in marine observations. The estimation of wave heights is very subjective and depends upon the experience of the observer and the size of the ship from which the observation is taken. Wave heights reported by most transient ships tend to be low when compared to reference measurements. Wave periods also appear to be somewhat low. Adjustment for these apparent biases has not been made in this Atlas.

THE ISOPLETH ANALYSES

The climatic data in this atlas are presented by isopleths (lines connecting points of equal magnitude) of long-term climatological scalar fields supplemented by graphs and tables. The isopleth analyses were completed cooperatively by a team of meteorologists. The basic charts were automatically plotted from one or two degree area summaries for the entire ocean basin.

As a further aid to data interpretation, the analysts made use of the observation count which was plotted with all summarized data. Additionally, continuing reference was made to the marine atlases and supplemental publications listed in the bibliography.

Extreme caution must be exercised when using statistics south of about 40°S. Data were extremely sparse in this area and a great deal of subjectivity was required in map analyses. A glance at the data coverage for tables and graphs in the

vicinity of any given ocean area being studied will give a good indication of data coverage.

THE GRAPHS AND TABLES

To supplement the isopleth analyses, graphs and tables are presented for each representative area having at least marginal data coverage (about 15 observations). The graphs and tables, in most instances, represent the objective compilation of available raw data for specified areas without regard to suspected biases or inconsistencies.

Since the final isopleth analyses reflect both objective and subjective considerations, differences may be found when comparing the graphical data for a representative area with the analyses.

THE INDIVIDUAL SURFACE CHARTS

The legend on each chart is designed to explain data content – tables, graphs and isopleths. Each legend contains detailed instructions on how to read the tables or graphs. The following paragraphs contain additional remarks likely to be of interest to those called upon to interpret the data and provide answers to specific operational questions.

Most of the graphs and tables allow approximation of the empirical probability of occurrence of selected criteria. This is a major factor in assessing the risk involved in operational planning. For certain elements, standard deviations are given on the graphs to provide a measure of relative variability. The standard deviation on these graphs is denoted by 's' and was computed using the expression:

$$s = \left[\frac{N\Sigma x_i^2 - (\Sigma x_i)^2}{N(N-1)} \right]^{\frac{1}{2}}$$

where N is the number of observations in the sample and x_i is the *ith* realization of the random variable X. The use of (N-1) in the denominator gives the best estimate of the population standard deviation.

SURFACE WINDS

Surface wind is the element most commonly observed and recorded. The wind distribution is presented by a combination of two graphic forms – the bar graph and the contingency table. The bar graph corresponds to the percent scale at the top of the square and gives reference to the wind direction frequency. The contingency table gives the percent frequency of each wind speed class within each direction. By adding the totals lines at the bottom of the graph it is possible to approximate the percent frequency of wind speed occurrence for selected criteria. For the example graph in the legend, 71% of all winds were less than 17 knots.

AIR TEMPERATURE

The percentage of temperatures greater than or equal to 20°C and mean air temperature were selected for isopleth analysis in response to requests by a number of users who considered these to be operationally significant. The mean temperature for each wind direction and calm is shown by dots in the graph opposite each direction and corresponding to the temperature scale at the bottom. The temperature range and scale may vary from area to area and month to month.

A conversion of °C to °F appears in Fig. 1. This is applicable to all temperature information (air, wet bulb, dew point, sea surface).

°C	°F	°C	°F	°C	°F	°C	°F
–12	10.4	–1	30.2	10	50.0	21	69.8
–11	12.2	0	32.0	11	51.8	22	71.6
–10	14.0	1	33.8	12	53.6	23	73.4
–9	15.8	2	35.6	13	55.4	24	75.2
–8	17.6	3	37.4	14	57.2	25	77.0
–7	19.4	4	39.2	15	59.0	26	78.8
–6	21.2	5	41.0	16	60.8	27	80.6
–5	23.0	6	42.8	17	62.6	28	82.4
–4	24.8	7	44.6	18	64.4	29	84.2
–3	26.6	8	46.4	19	66.2	30	86.0
–2	28.4	9	48.2	20	68.0	31	87.8

Fig. 1. Temperature Conversion – Celsius to Fahrenheit

T-H INDEX AND TEMPERATURE EXTREMES

The American Society of Heating and Ventilating, as early as 1923, introduced a term called "effective temperature"

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–9	15.8	2	35.6	13	55.4	24	75.2
–8	17.6	3	37.4	14	57.2	25	77.0
–7	19.4	4	39.2	15	59.0	26	78.8
–6	21.2	5	41.0	16	60.8	27	80.6
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Fig. 1. Temperature Conversion – Celsius to Fahrenheit

T-H INDEX AND TEMPERATURE EXTREMES

The American Society of Heating and Ventilating, as early as 1923, introduced a term called "effective temperature" which is a measure of comfort based on temperature and humidity. This is the term we call THI (Temperature-Humidity Index). It has been empirically determined that a majority of people will be uncomfortable when the index reaches 24°C. THI is computed by the following equation, adapted from one described by E. C. Thom, 1957:

$$THI = 0.4\,(T_d + T_{wb}) + 4.7778$$

where: T_d = Dry Bulb Temperature (°C)
T_{wb} = Wet Bulb Temperature (°C)
THI is in degrees Celsius

Isopleths of the 1% and 99% levels of air temperature have been selected to present extreme temperature conditions. The graphs show air temperature versus wind speed. Use may be made of these charts to determine the extent of discomfort likely because of extreme heat or cold. They may also be used to estimate the likelihood of superstructure icing.

Ice accretion is a complicated process that depends upon sea conditions, temperature, wind and the size and behavior of the ship. Superstructure icing can affect all ships but is more dangerous for smaller vessels. Icing potential exists when the air temperature falls below the freezing temperature of sea water (usually about –2°C) with the wind speed equal to or greater than 11 knots. The lower the temperature and higher the wind speed, the greater the icing potential. Ice accretion may become quite severe with temperatures below –9°C and wind above 34 knots.

SEA SURFACE TEMPERATURE

Sea-surface temperature is recorded with fairly high frequency in marine observations. The 1% and 99% isopleths give estimates of the extremes that may be encountered at any location. The graphs are simple cumulative percent frequency presentations. The temperature range and scale on the graphs may vary from area to area and month to month. As stated earlier, satellite data were used for guidance, but were not included in the graphs. Oceanographic data were included in all phases.

Sea surface temperature can be used to estimate the approximate time a person in ordinary clothes and life preserver may be expected to survive in the water. Fig. 2 is adapted from the *National Search and Rescue Manual,* U.S. Coast Guard Manual 308 (1973).

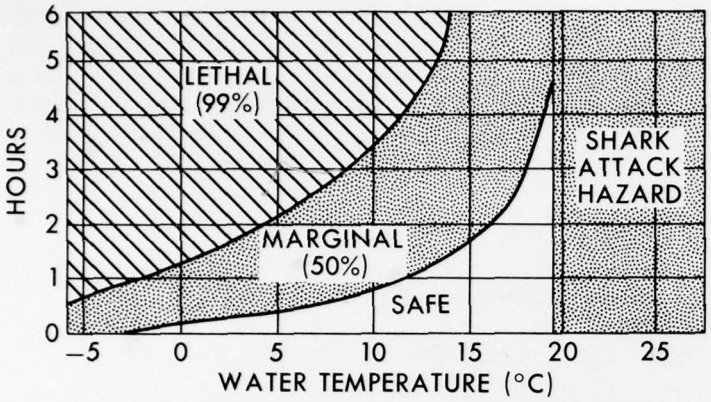


Fig. 2. Life Expectancy Without Antiexposure Suit

Recent research has shown that chances for survival from drowning are enhanced in cool water, below about 22°C but above critical levels (see Fig. 2).

For further reference, see Hayward *et al.* (1976) and Nemiroff (1977).

HUMIDITY

Moisture content of the atmosphere is an element which has been recorded relatively infrequently in marine observations. The 1% and 99% dew-point temperature isopleths give estimates of extremes of this element that may be encountered at any location.

The graph depicts wet bulb and relative humidity information. The cumulative percent frequency of wet-bulb temperatures may be read from the solid line with reference to values on the scale at the top of the graph. Relative humidity may be read from the dashed line with reference to the scale at the bottom of the graph.

PRECIPITATION

Precipitation graphs are intended to depict the frequency of precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow, at the time of the observation. Charts show precipitation frequency regardless of form. Based on work done in connection with Volume I (Revised), North Atlantic Ocean, present weather codes 20-27 (precipitation within the past hour) were counted in precipitation frequencies to correct an apparent observational bias. The graphs show precipitation by wind direction. The percent frequency of all observations which reported precipitation is printed in the upper right corner of each graph. The distribution of precipitation by wind direction (and calm) is given by the bar graph. This graph is based on precipitation frequency and not on wind direction frequency. The reader should refer to the surface wind chart for the wind direction and speed distribution.

Satellite guidance was employed in data sparse areas (Rao *et al.*, 1976, 1977).

VISIBILITY

The cumulative percent frequency of horizontal visibility is presented by class intervals defined in terms of nautical miles. The percentage of horizontal visibility equal to or greater than 25 nautical miles can be obtained by subtracting from 100% the cumulative percent frequency at the "less than 25" point on each graph. Caution is advised when interpreting these instances since, because of curvature of the earth, it is virtually impossible to see 25 miles horizontally from the bridge of most ships. The supplemental table at the bottom of the graph gives percentage of visibilities less than 2 nautical miles which occurred with each wind direction and calm.

CLOUD COVER

Even with the increased data base, the quality and quantity of low cloud data is quite poor. The total cloud amount element does not suffer from this deficiency to so great an extent. The use of satellite data also bolsters confidence in the total cloud statistics. Cloud patterns derived from the marine observations and those depicted by satellites show fairly close agreement (U.S. Department of Commerce and United States Air Force, 1971).

The observation count on the graphs is that of observations containing total cloud amount. The low cloud curve on the graph is usually based on less data than the total cloud curve. This could lead to inconsistencies between low cloud amount and total cloud amount. In all cases these were resolved in favor of the total cloud by making the frequency curves coincide.

The cumulative percent frequency of a cloud amount equal to or less than the amount intersected by the curve may be read for total cloud from the solid line or low cloud from the dashed line. The percent frequency of obscurations may be determined by subtracting the cumulative percent frequency corresponding to 8/8 coverage from 100%. The bar graph portion of the figure shows the percent frequency of low cloud amount equal to or greater than 5/8 and equal to or greater than 7/8 for each wind direction and calm. Total sky obscurations are considered as 8/8 coverage for these purposes.

CEILING AND VISIBILITY

Simultaneous ceiling-visibility contingencies are presented in isopleth and tabular form. They are designed as an aid to situations where both vertical and horizontal visibility are the

wind direction and speed distribution.

Satellite guidance was employed in data sparse areas (Rao *et al.*, 1976, 1977).

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CEILING AND VISIBILITY

Simultaneous ceiling-visibility contingencies are presented in isopleth and tabular form. They are designed as an aid to situations where both vertical and horizontal visibility are the major items of concern. Since an "aircraft" type ceiling value is not available, the ceiling height is estimated from the height of the low cloud (h) when the amount of low cloud (N_h) is greater than 4/8. Total sky obscurations are also considered to be ceilings. If they are ground-based, they are considered to have a height equal to zero.

WIND - VISIBILITY - CLOUDINESS

This series of charts is designed to give the planner an estimate of the probability of occurrence of certain significant operational conditions. The conditions for optimum and poor carrier operations are those recommended by the users of the earlier atlas series. Of the elements used in these statistics, height of low cloud ceiling has the least reliability in the case of transient ship observations.

It should be noted that in both the contingency tables and the isopleths, the poor carrier operation conditions are *and/or* situations. This means if any one of the poor conditions of ceiling, visibility or wind speed exists, the event is counted as *poor*. However, in the case of optimum conditions it is an *and* situation. That is, the ceiling must be greater than or equal to 5000 feet *and* visibility greater than or equal to 5 nautical miles *and* wind 11-21 knots.

SEA LEVEL PRESSURE AND MEAN WIND

Two sets of wind statistics are presented. The vector mean wind is shown by arrows (direction of flow toward the locator dot with the resultant magnitude of the vector plotted at the end of the arrow). The scalar mean speed without regard to direction is shown by isopleth analysis. In areas of high persistence of direction, the magnitude of the mean vector is nearly as great as the scalar mean speed. Pressure graphs and charts are also shown.

WAVES (LESS THAN 1.5 AND LESS THAN 2.5 METERS)

In these analyses, the higher of the sea or swell is selected for summarization. If the heights are equal, the wave with the longer period is selected. The graphs accompanying the low wave charts (less than 1.5 and less than 2.5 meters) show wave height versus wave direction. The bar graph and the percent scale at the top of the chart give the percent frequency of waves from each direction. Indeterminate directions are combined with calms. The precent frequency of wave heights (bottom scale) may be read for each height interval and wave direction from the contingency table. The

isopleth analyses of the percent frequency of heights less than 1.5 and less than 2.5 meters are for generally non-hazardous sea conditions.

Fig. 3 shows the conversion from meters to feet.

Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet
0	0	3.0	9.8	6.0	19.7	9.0	29.5
0.5	1.6	3.5	11.5	6.5	21.3	9.5	31.2
1.0	3.3	4.0	13.1	7.0	23.0	10.0	32.8
1.5	4.9	4.5	14.8	7.5	24.6	10.5	34.4
2.0	6.6	5.0	16.4	8.0	26.2	11.0	36.1
2.5	8.2	5.5	18.0	8.5	27.9	11.5	37.7

Fig. 3. Height Conversion – Meters to Feet

WAVES (GREATER THAN OR EQUAL TO 3.5 AND GREATER THAN OR EQUAL TO 6 METERS)

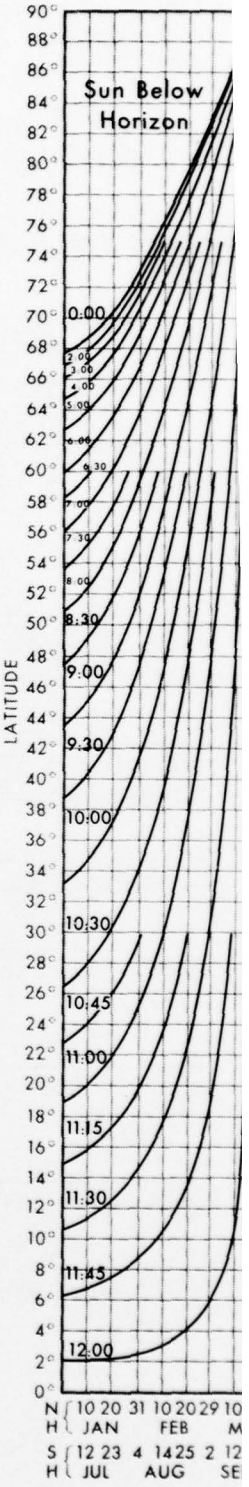
Wave heights in the greater than or equal to 3.5 and greater than or equal to 6 meter range represent increasingly hazardous conditions. Contingency tables of wave period versus wave height accompany these charts.

LOW PRESSURE CENTERS

Detailed data on extratropical cyclone tracks were not available. Tropical cyclones are not known to occur in the South Atlantic Ocean (Crutcher and Quayle, 1974). A few tropical storms have occurred in the fringe areas of the base map which overlap into the North Atlantic and Indian Oceans. The reader is referred to the above-cited reference for those areas.

DURATION OF DAYLIGHT

The Duration of Daylight Chart (Fig. 4.) defines daylight as the period from sunrise to sunset. The upper scale at the bottom of the chart is for the Northern Hemisphere; the lower scale is for the Southern Hemisphere. The data source was the U.S. Naval Observatory (1945), and is accurate for the entire 20th Century. Further details may be obtained from *The Daylighter* by the Navy Weather Research Facility (1960). Additional light (during twilight) may be usable for many purposes. Duration of daylight in high latitudes (poleward of about 60°) becomes increasingly dependent upon atmospheric conditions and refraction and there may be some departure from the values depicted on the charts.



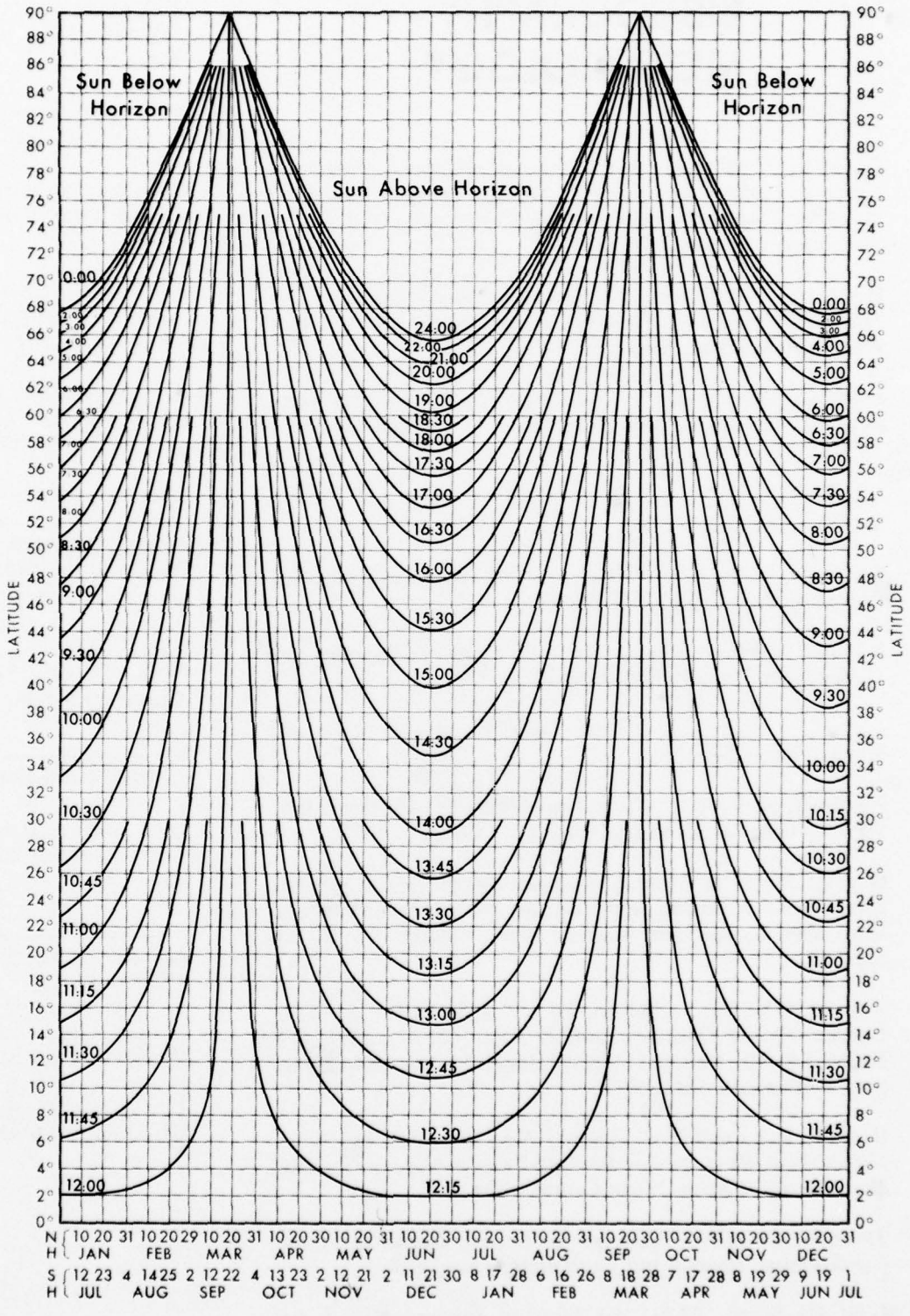


Fig. 4. Duration of Daylight

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PART II - OCEANOGRAPHY

TIDES

The information presented on the charts (types of tides, typical tide curves, and tide ranges) was derived from tide tables and tables of tidal harmonic constants. The length of record and the spacing of the observational network along the South Atlantic coasts are generally sufficient for most analytical purposes.

Tides are not considered of practical importance in the open ocean. Hence, there are few measurements in "deep water" and no method has been accepted to date for use by the International Hydrographic Bureau and member nations.

CURRENTS

The ocean current charts are compiled principally from ship drift reports that were forwarded by the various merchant marines to the Naval Oceanographic Office. As should be expected, the density of observations is greatest, and therefore the reliability of the presentation is best, along the major shipping lanes. From these drift observations the sets and average speeds of the prevailing currents are calculated for each 1° quadrangle. Considerable variation from the directions and speeds of the indicated prevailing currents can be expected, especially in areas where the current system is weak.

Tidal currents, shown where available, are subject to modifications of speed and direction by winds and other nonperiodic variables.

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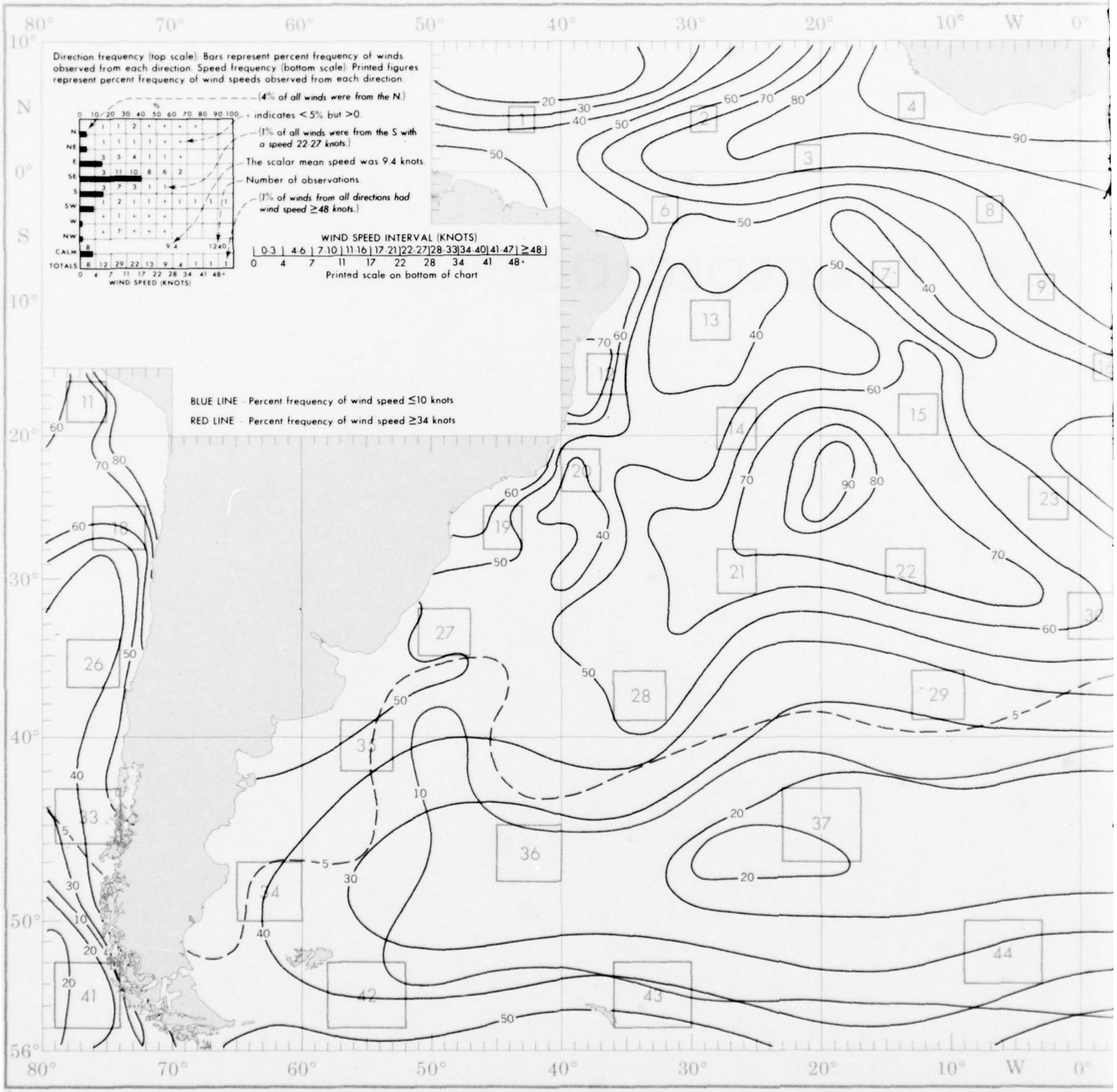
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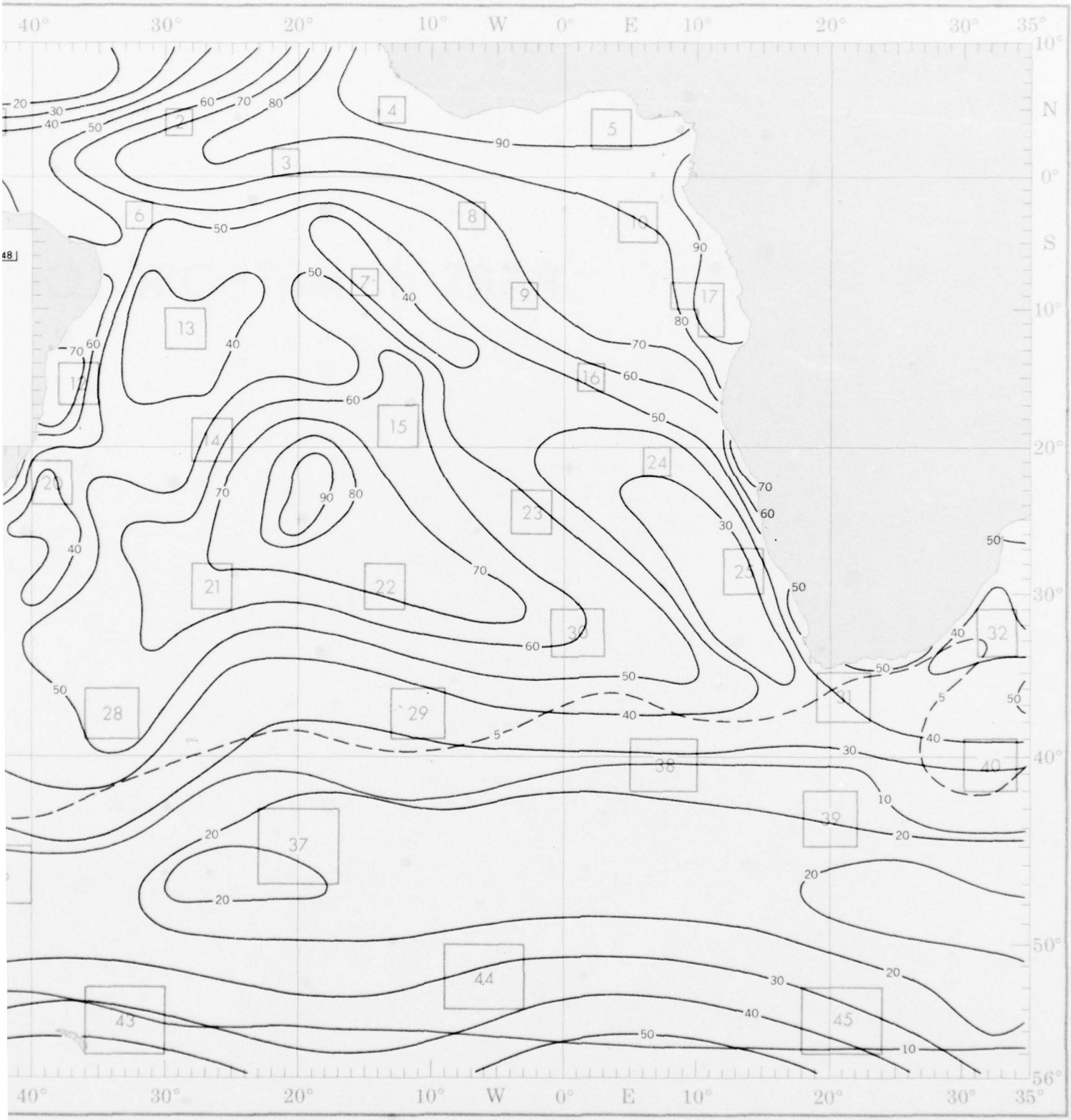
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PART I METEOROLOGY

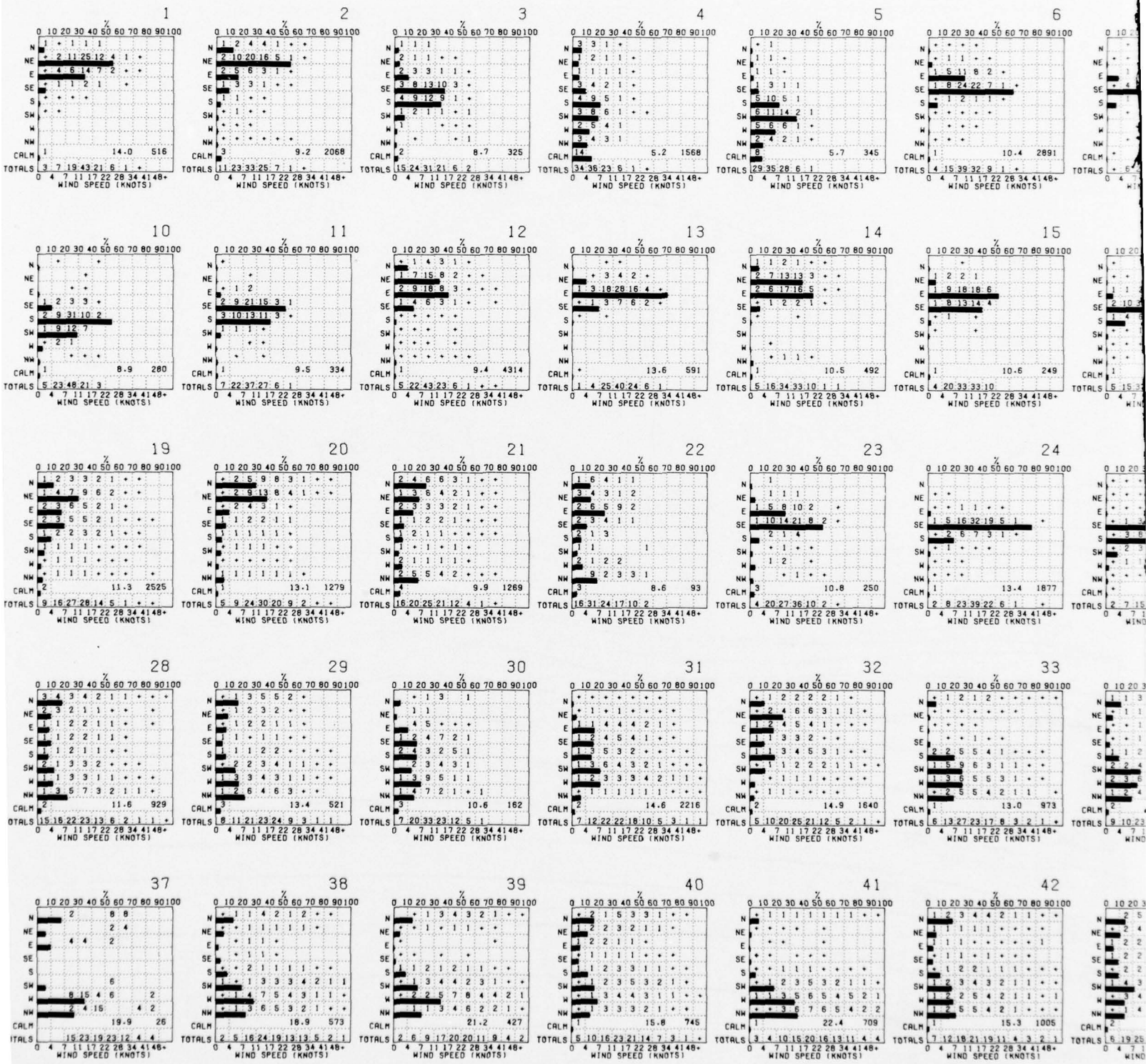
JANUARY


Direction frequency (top scale). Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale). Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

SURFACE WINDS



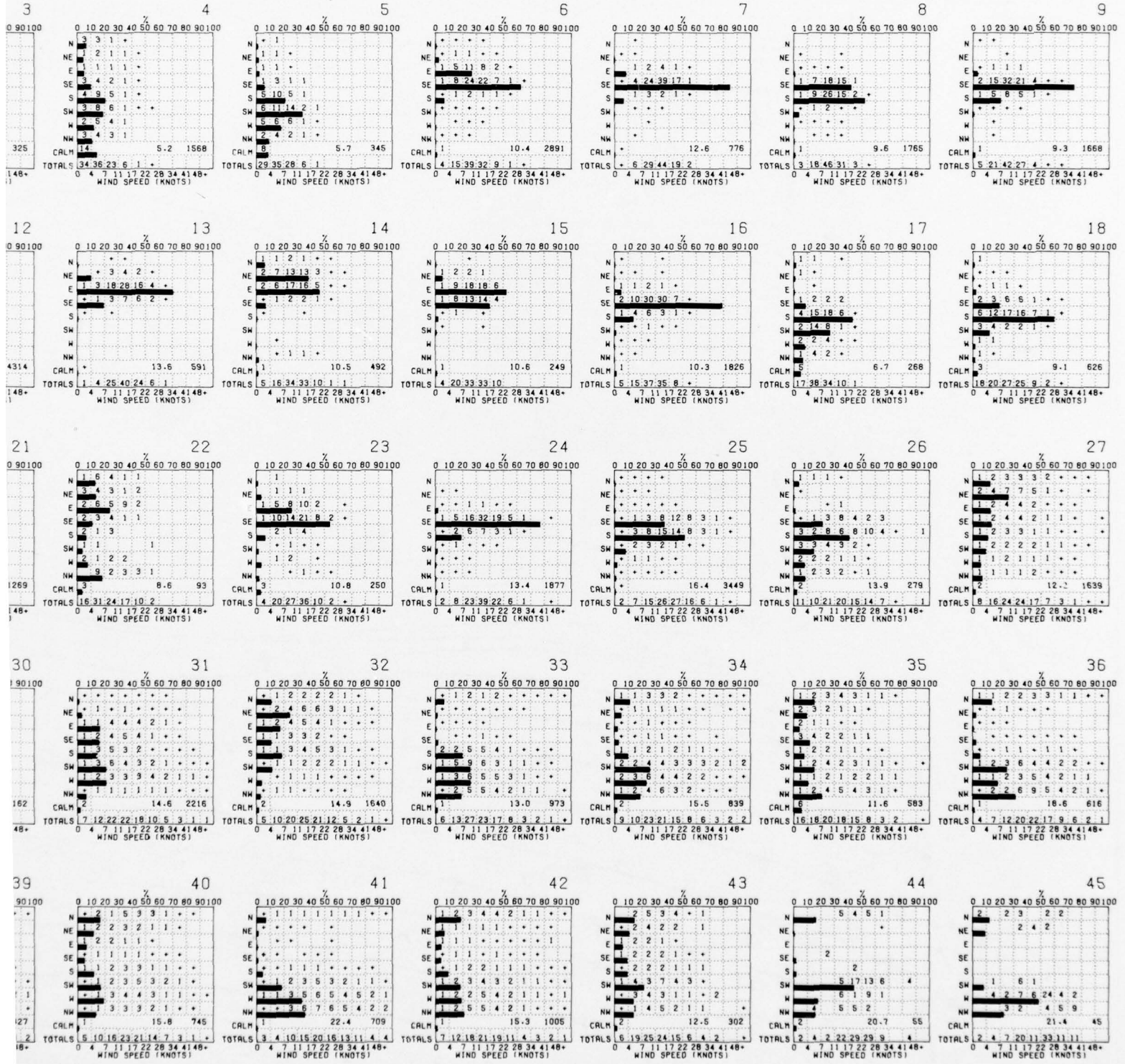
WIND DIRECTION AND SPEED



Graphs represent the objective compilation of available data for specified areas without regard to suspected
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was

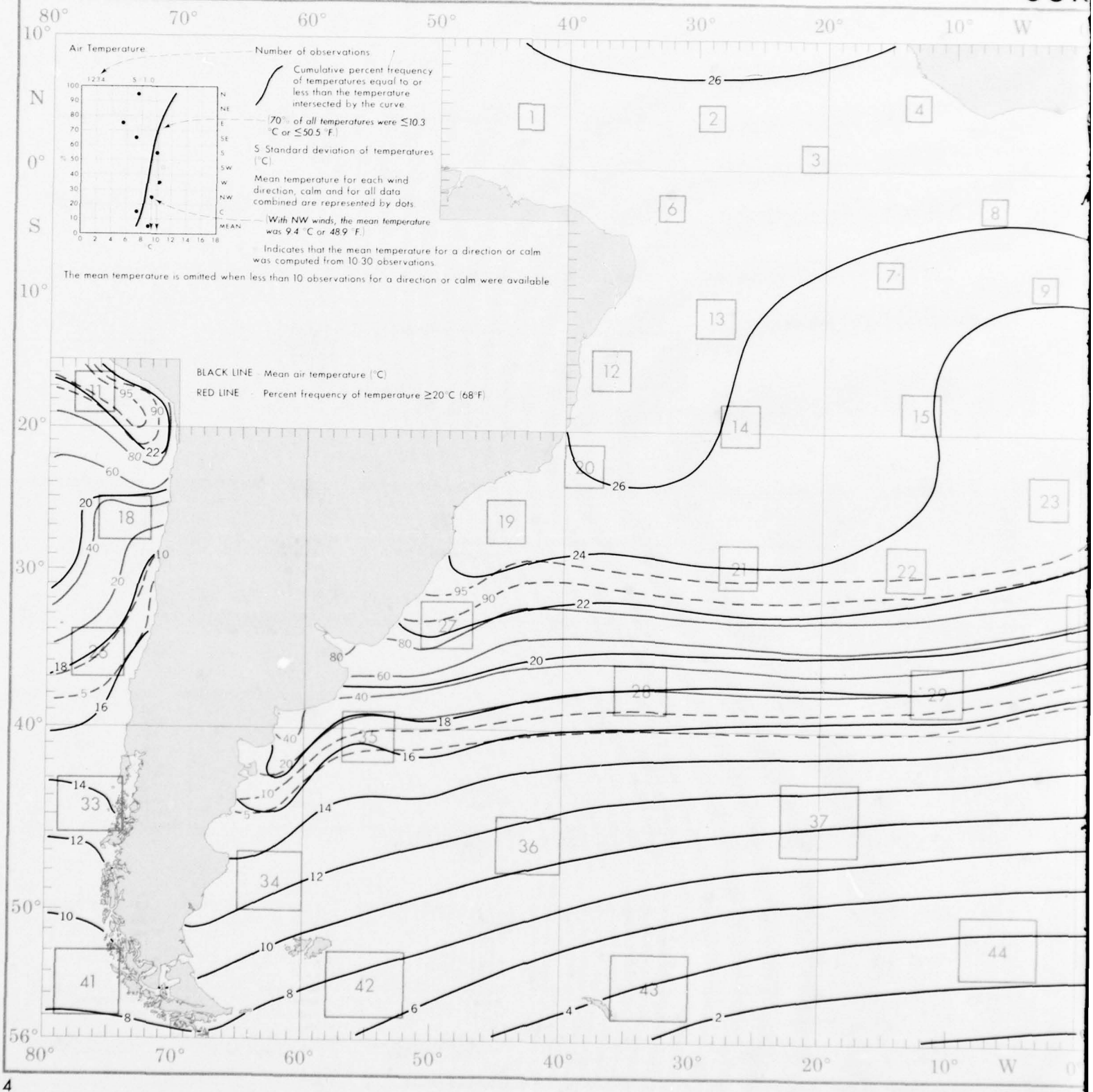
SPEED

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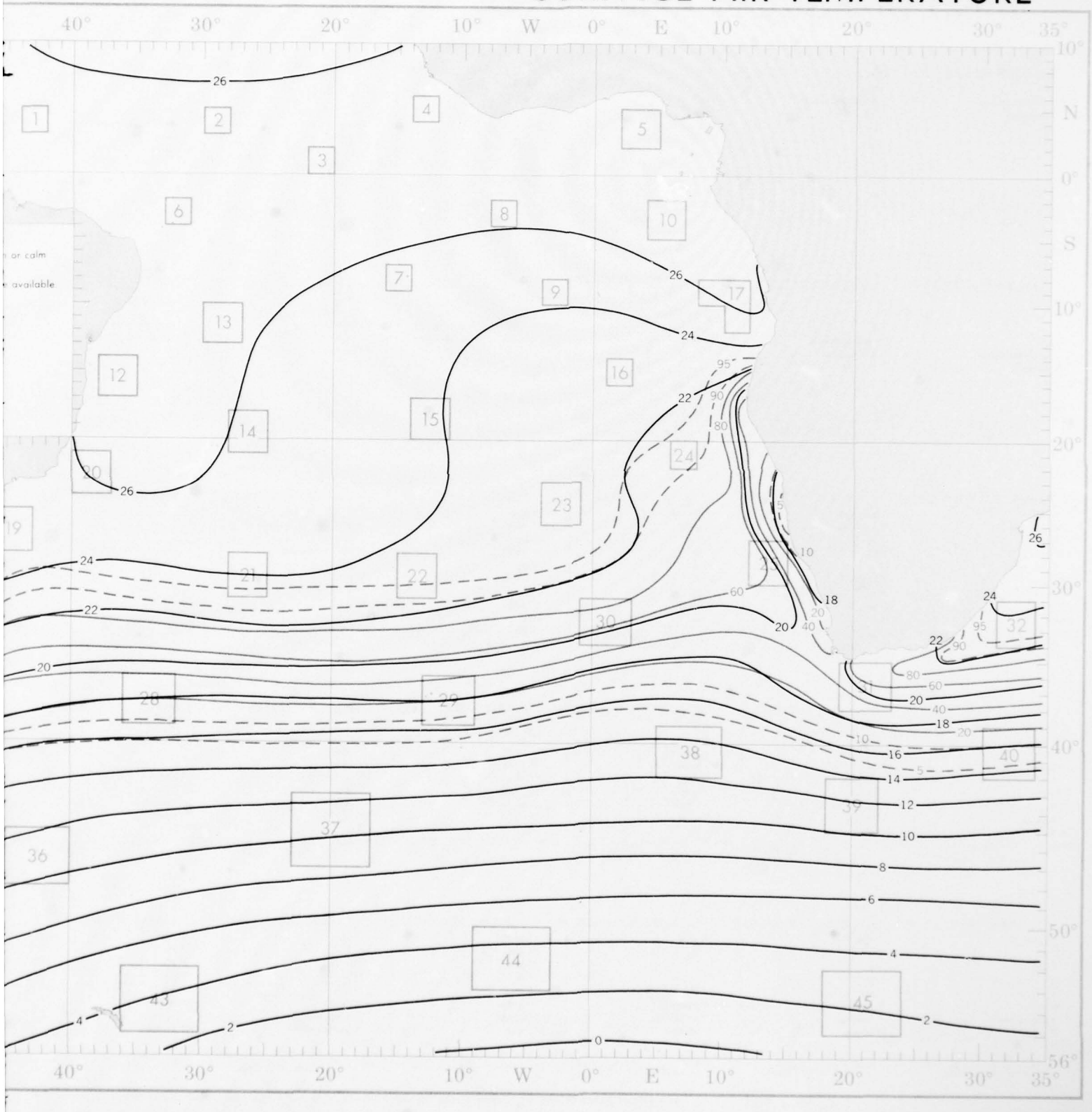


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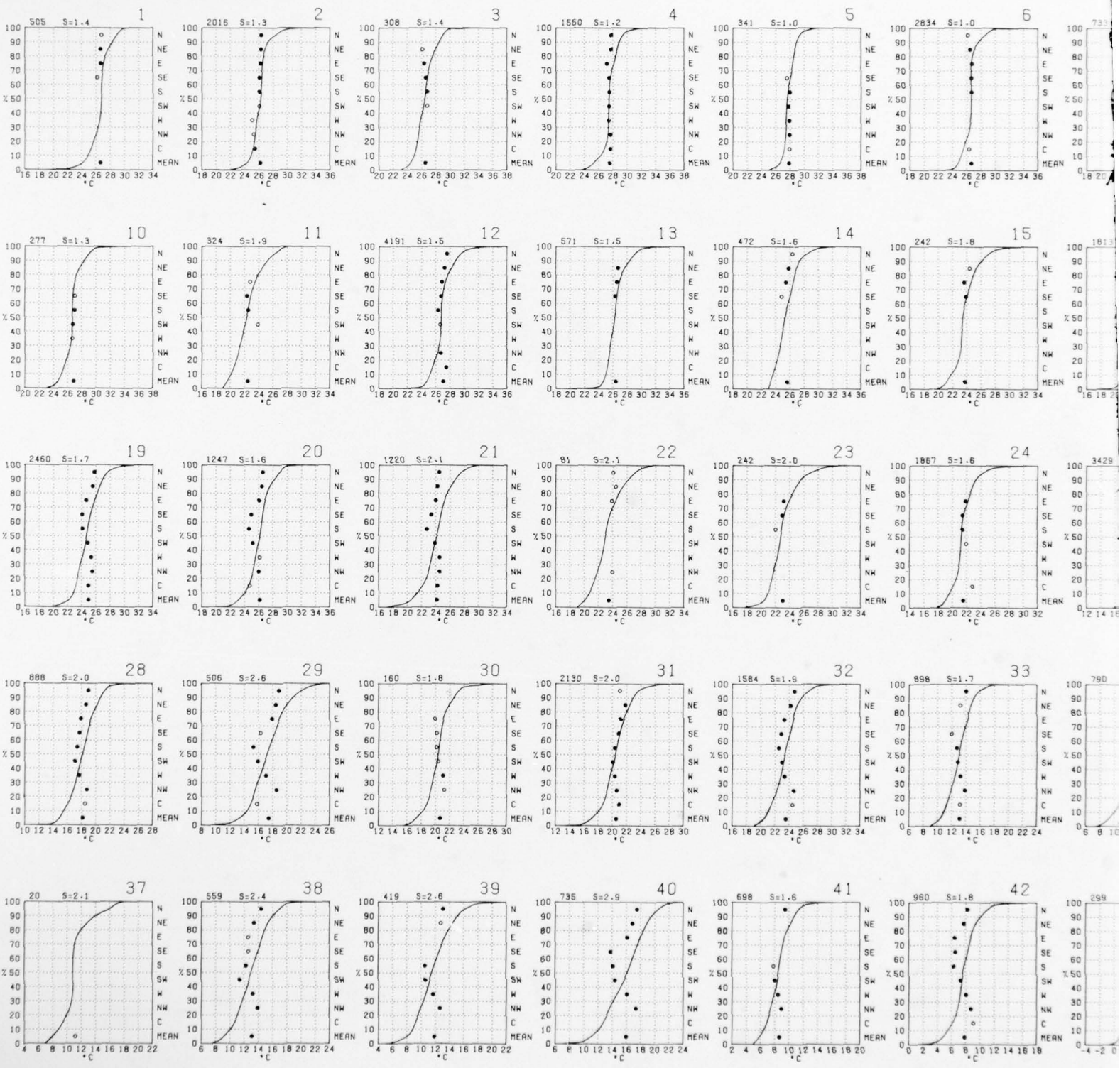
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Air Temperature
Number of observations
1234 S 1.0
Cumulative percent frequency of temperatures equal to or less than the temperature intersected by the curve
70% of all temperatures were ≤10.3 °C or ≤50.5 °F.
S Standard deviation of temperatures (°C)
Mean temperature for each wind direction, calm and for all data combined are represented by dots.
With NW winds, the mean temperature was 9.4 °C or 48.9 °F.
Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.
The mean temperature is omitted when less than 10 observations for a direction or calm were available
N
NE
E
SE
S
SW
W
NW
C
MEAN
%
C
BLACK LINE - Mean air temperature (°C)
RED LINE - Percent frequency of temperature ≥20°C (68°F)
80°
70°
60°
50°
40°
30°
20°
10°
W
10°
N
0°
S
10°
20°
30°
40°
50°
56°
1
2
3
4
6
7
8
9
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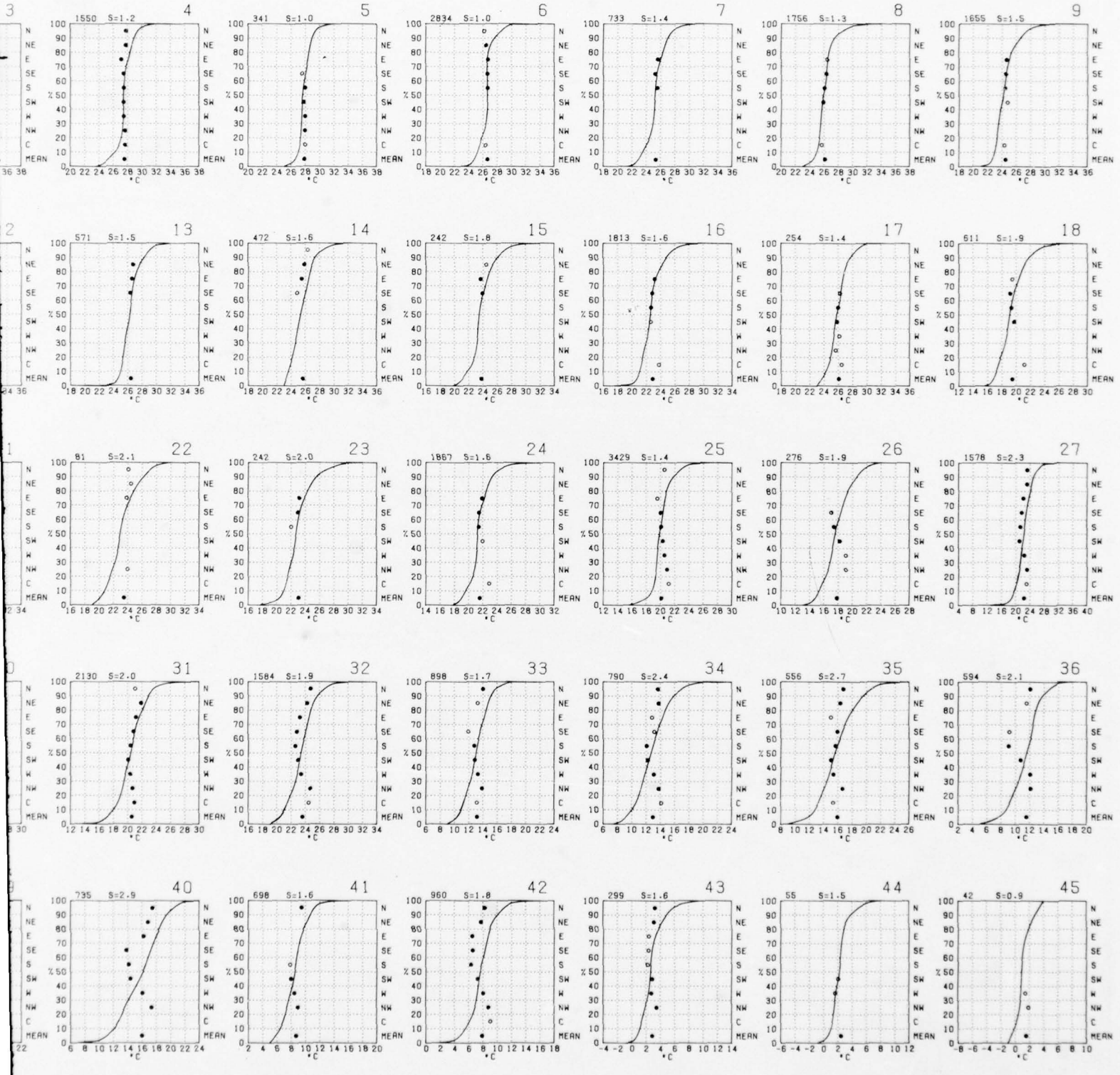
SURFACE AIR TEMPERATURE



SURFACE AIR TEMPERATURE



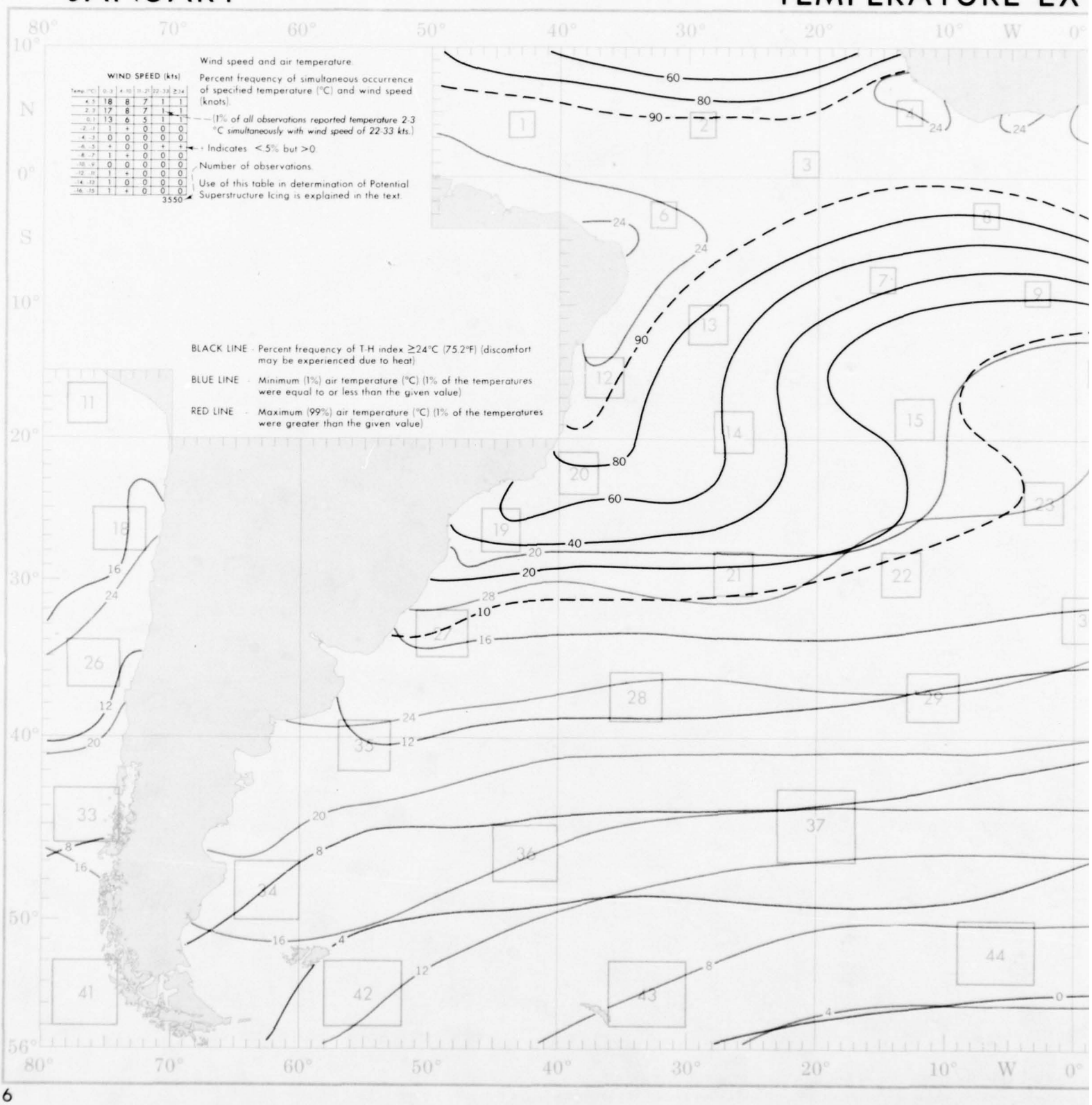
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The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w



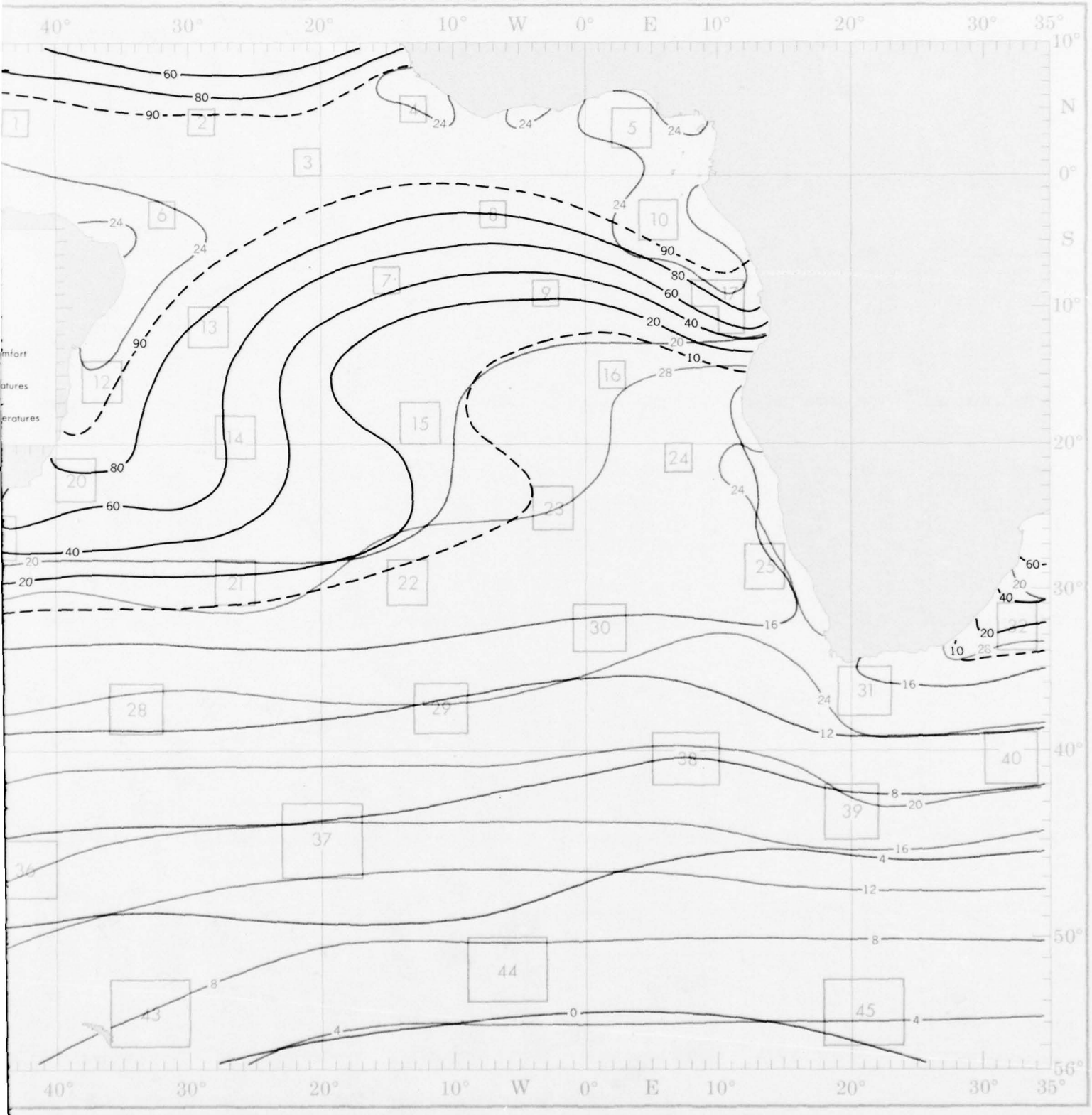
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nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JANUARY

TEMPERATURE EX



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	1	0	0
28.29	1	5	14	2	0
26.27	+	17	40	5	+
24.25	1	2	7	1	0
22.23	+	1	1	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

505

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	+	1	+	0	0
28.29	1	7	4	+	0
26.27	6	37	22	1	0
24.25	3	11	5	+	0
22.23	+	1	+	0	0
20.21	+	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2025

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	1	1	+	0	0
28.29	3	10	9	+	0
26.27	11	31	14	2	0
24.25	2	12	3	1	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

309

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	2	+	0	0
28.29	19	25	3	0	0
26.27	15	27	3	+	0
24.25	+	3	1	0	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1640

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	1	4	1	0	0
28.29	17	35	5	0	0
26.27	12	23	2	0	0
24.25	0	0	0	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

349

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	+	0	0
30.31	+	1	1	0	0
28.29	+	9	7	+	0
26.27	2	40	32	1	0
24.25	1	4	2	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

2838

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	3	+	0	0
28.29	1	18	5	0	0
26.27	3	45	16	0	0
24.25	1	5	1	0	0
22.23	+	0	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

279

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	+	0	0
26.27	1	5	1	0	0
24.25	+	12	5	0	0
22.23	3	23	18	+	0
20.21	2	16	10	+	0
18.19	1	1	1	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

324

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	+	1	+	0	0
30.31	+	3	1	0	0
28.29	1	16	8	+	0
26.27	3	40	18	1	+
24.25	1	4	2	+	0
22.23	+	+	+	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4201

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	0	0	0
30.31	0	1	3	+	0
28.29	0	5	12	1	0
26.27	0	18	34	4	0
24.25	+	5	13	2	0
22.23	0	+	+	0	0
20.21	+	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

571

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	1	0	0
28.29	1	6	4	0	0
26.27	2	19	17	1	0
24.25	2	20	18	+	0
22.23	+	3	3	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

472

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	2	1	0	0
26.27	1	5	7	0	0
24.25	1	21	14	0	0
22.23	1	23	19	0	0
20.21	+	1	4	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

242

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	0	1	1	+	0
28.29	1	3	2	+	0
26.27	3	13	11	2	+
24.25	4	19	19	3	+
22.23	1	6	8	2	+
20.21	+	1	1	+	0
18.19	0	0	+	0	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2467

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	1	1	+	0
28.29	+	6	10	1	0
26.27	2	16	26	7	+
24.25	2	8	11	2	0
22.23	1	2	2	+	0
20.21	0	0	+	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1247

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	+	+	0
28.29	2	2	1	+	0
26.27	3	9	7	1	+
24.25	7	19	13	1	0
22.23	4	11	8	2	+
20.21	1	2	3	+	+
18.19	0	1	1	+	0
16.17	0	+	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1220

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	4	1	0	0
26.27	1	7	2	0	0
24.25	1	21	8	0	0
22.23	4	24	11	1	0
20.21	5	4	2	1	0
18.19	1	1	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

84

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	+	0	0
28.29	0	2	1	0	0
26.27	0	7	3	0	0
24.25	+	10	8	0	0
22.23	2	20	23	2	0
20.21	2	6	10	+	0
18.19	0	1	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

243

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	+	+	+	0
26.27	+	1	+	+	0
24.25	1	4	4	+	0
22.23	1	10	21	2	+
20.21	1	15	32	4	0
18.19	0	1	3	+	0
16.17	0	+	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1873

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	0	0	0
22.23	1	1	1	+	0
20.21	5	9	7	2	1
18.19	5	13	13	2	+
16.17	3	12	11	3	1
14.15	+	2	3	1	+
12.13	0	0	1	0	0
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

888

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	1	0	0
22.23	+	3	2	+	+
20.21	1	5	8	1	0
18.19	1	7	14	4	0
16.17	3	9	12	5	+
14.15	3	5	8	2	1
12.13	1	1	2	+	+
10.11	0	+	+	0	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

506

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	1	0	1	0	0
24.25	0	2	3	0	0
22.23	2	13	7	0	0
20.21	5	29	16	2	0
18.19	1	6	7	3	0
16.17	0	2	1	0	0
14.15	0	0	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

161

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	+	0	0
26.27	+	1	+	+	0
24.25	1	3	2	+	+
22.23	3	9	10	3	1
20.21	2	14	16	6	2
18.19	1	7	8	3	1
16.17	+	1	2	1	+
14.15	0	0	+	+	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2133

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	+	0	0
28.29	+	1	1	+	0
26.27	+	5	5	2	+
24.25	3	10	17	6	1
22.23	2	11	17	7	1
20.21	+	3	5	2	1
18.19	0	+	1	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1593

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	+	+	+	+
16.17	+	3	4	2	+
14.15	2	14	14	3	1
12.13	2	17	17	5	1
10.11	1	4	5	2	1
8.9	0	+	1	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

898

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	5	0	0	0
14.15	0	0	5	5	5
12.13	0	0	5	5	0
10.11	0	10	30	15	0
8.9	0	0	10	0	0
6.7	0	0	0	0	5
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

20

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	0	0
18.19	+	1	2	+	+
16.17	+	3	5	3	1
14.15	1	5	15	6	1
12.13	1	7	11	9	3
10.11	+	4	7	5	2
8.9	0	1	2	3	2
6.7	0	0	0	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

559

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	+	+	+	0	0
18.19	+	+	+	1	0
16.17	0	1	2	3	+
14.15	+	2	7	6	3
12.13	1	4	7	10	6
10.11	+	4	12	6	3
8.9	0	2	7	5	2
6.7	0	+	1	+	1
4.5	0	+	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0

419

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	0	0	0	0
22.23	+	+	1	+	+
20.21	1	2	5	2	+
18.19	1	6	9	5	1
16.17	1	6	11	5	1
14.15	1	6	9	4	1
12.13	1	3	7	3	+
10.11	+	1	2	2	+
8.9	0	+	+	+	+
6.7	0	+	+	0	0
4.5	0	0	0	0	0

735

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	0	+	+	0
12.13	+	1	1	1	+
10.11	1	4	9	7	6
8.9	1	7	18	14	9
6.7	+	2	6	6	4
4.5	+	+	+	1	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

698

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	+	0	0
12.13	1	2	1	+	+
10.11	1	5	6	2	+
8.9	2	12	19	6	2
6.7	3	10	12	6	2
4.5	1	2	2	1	1
2.3	0	+	+	+	+
0.1	0	0	0	+	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

960

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

EMPERATURE

JANUARY

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	2	+	0	0
28.29	19	25	3	0	0
26.27	15	27	3	+	0
24.25	+	3	1	0	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1640

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	1	4	1	0	0
28.29	17	35	5	0	0
26.27	12	23	2	0	0
24.25	0	0	0	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

349

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	+	0	0
30.31	+	1	1	0	0
28.29	+	9	7	+	0
26.27	2	40	32	1	0
24.25	1	4	2	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

2838

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	1	0	0
28.29	0	2	3	+	0
26.27	0	15	23	+	0
24.25	+	17	33	1	0
22.23	+	1	2	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

733

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	+	0	0
30.31	0	2	+	0	0
28.29	1	7	3	0	0
26.27	1	36	21	0	0
24.25	1	18	8	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1767

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	+	0	0
30.31	0	1	+	0	0
28.29	+	3	1	0	0
26.27	1	12	5	+	0
24.25	3	34	17	+	0
22.23	1	13	8	+	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1672

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	0	0	0
30.31	0	1	3	+	0
28.29	0	5	12	1	0
26.27	0	18	34	4	0
24.25	+	5	13	2	0
22.23	0	+	+	0	0
20.21	+	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

571

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	1	0	0
28.29	1	6	4	0	0
26.27	2	19	17	1	0
24.25	2	20	18	+	0
22.23	+	3	3	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

472

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	2	1	0	0
26.27	1	5	7	0	0
24.25	1	21	14	0	0
22.23	1	23	19	0	0
20.21	+	1	4	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

242

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	+	1	+	0	0
26.27	1	3	2	+	0
24.25	2	12	8	0	0
22.23	2	30	25	+	0
20.21	+	7	6	+	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1827

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	2	1	0	0	0
28.29	2	7	1	0	0
26.27	10	41	5	0	0
24.25	3	20	5	0	0
22.23	+	2	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

259

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	0	0	0
26.27	+	+	+	0	0
24.25	1	1	+	0	0
22.23	3	5	2	+	0
20.21	7	15	8	1	0
18.19	5	20	18	1	0
16.17	1	4	5	0	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

611

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	4	1	0	0
26.27	1	7	2	0	0
24.25	1	21	8	0	0
22.23	4	24	11	1	0
20.21	5	4	2	1	0
18.19	1	1	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

84

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	+	0	0
28.29	0	2	1	0	0
26.27	0	7	3	0	0
24.25	+	10	8	0	0
22.23	2	20	23	2	0
20.21	2	6	10	+	0
18.19	0	1	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

243

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	+	+	+	0
26.27	+	1	+	+	0
24.25	1	4	4	+	0
22.23	1	10	21	2	+
20.21	1	15	32	4	0
18.19	0	1	3	+	0
16.17	0	+	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1873

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	0	+	0
26.27	+	+	+	0	+
24.25	+	1	1	+	+
22.23	+	4	8	2	+
20.21	1	11	28	12	+
18.19	1	5	15	7	1
16.17	0	+	+	+	+
14.15	0	+	+	+	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

3442

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	1	1	2	0	0
20.21	4	9	2	1	0
18.19	3	10	15	8	+
16.17	3	9	15	10	+
14.15	1	1	1	3	+
12.13	0	1	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

276

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	1	+	+	0
26.27	1	3	3	+	0
24.25	2	9	12	2	+
22.23	3	14	14	4	1
20.21	2	8	9	3	+
18.19	1	3	2	1	+
16.17	+	+	+	+	0
14.15	0	0	0	+	0
12.13	0	+	+	+	0
10.11	0	0	0	0	0

1583

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	+	0	0
26.27	+	1	+	+	0
24.25	1	3	2	+	+
22.23	3	9	10	3	1
20.21	2	14	16	6	2
18.19	1	7	8	3	1
16.17	+	1	2	1	+
14.15	0	0	+	+	+
12.13	0	+	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2133

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	+	0	0
28.29	+	1	1	+	0
26.27	+	5	5	2	+
24.25	3	10	17	6	1
22.23	2	11	17	7	1
20.21	+	3	5	2	1
18.19	0	+	1	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1593

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	+	+	+	+
16.17	+	3	4	2	+
14.15	2	14	14	3	1
12.13	2	17	17	5	1
10.11	1	4	5	2	1
8.9	0	+	1	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

898

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	0	0	0
20.21	+	+	0	0	0
18.19	1	2	1	+	0
16.17	1	3	4	1	0
14.15	2	10	11	4	1
12.13	2	11	12	4	2
10.11	1	6	7	3	4
8.9	+	1	1	2	1
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

791

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	+	0	0
22.23	1	1	1	0	0
20.21	1	3	3	1	0
18.19	2	7	7	3	+
16.17	4	10	9	2	1
14.15	3	10	9	5	1
12.13	3	6	3	1	+
10.11	1	1	1	0	0
8.9	0	+	+	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

556

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	0	0	0	0
16.17	+	1	1	1	0
14.15	1	2	5	4	2
12.13	2	7	18	9	4
10.11	1	5	12	7	2
8.9	1	2	5	5	1
6.7	0	1	1	+	+
4.5	0	0	+	0	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

594

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	0	0	0	0
22.23	+	+	1	+	+
20.21	1	2	5	2	+
18.19	1	6	9	5	1
16.17	1	6	11	5	1
14.15	1	6	9	4	1
12.13	1	3	7	3	+
10.11	+	1	2	2	+
8.9	0	+	+	+	+
6.7	0	+	+	0	0
4.5	0	0	0	0	0

735

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	0	+	+	0
12.13	+	1	1	1	+
10.11	1	4	9	7	6
8.9	1	7	18	14	9
6.7	+	2	6	6	4
4.5	+	+	+	1	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

698

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	+	0	0
12.13	1	2	1	+	+
10.11	1	5	6	2	+
8.9	2	12	19	6	2
6.7	3	10	12	6	2
4.5	1	2	2	1	1
2.3	0	+	+	+	+
0.1	0	0	0	+	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

960

43

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	1	+	+	0
6.7	1	2	+	+	0
4.5	2	12	9	2	1
2.3	3	24	24	6	1
0.1	0	6	5	1	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

299

44

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	0	2	0
6.7	0	0	0	0	0
4.5	2	2	15	11	0
2.3	0	4	20	20	0
0.1	0	0	16	5	4
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

55

45

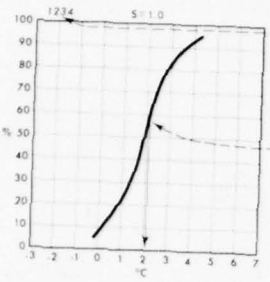
WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
4.5	2	0	0	0	0
2.3	0	0	10	26	12
0.1	0	12	21	17	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0

42

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JANUARY



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

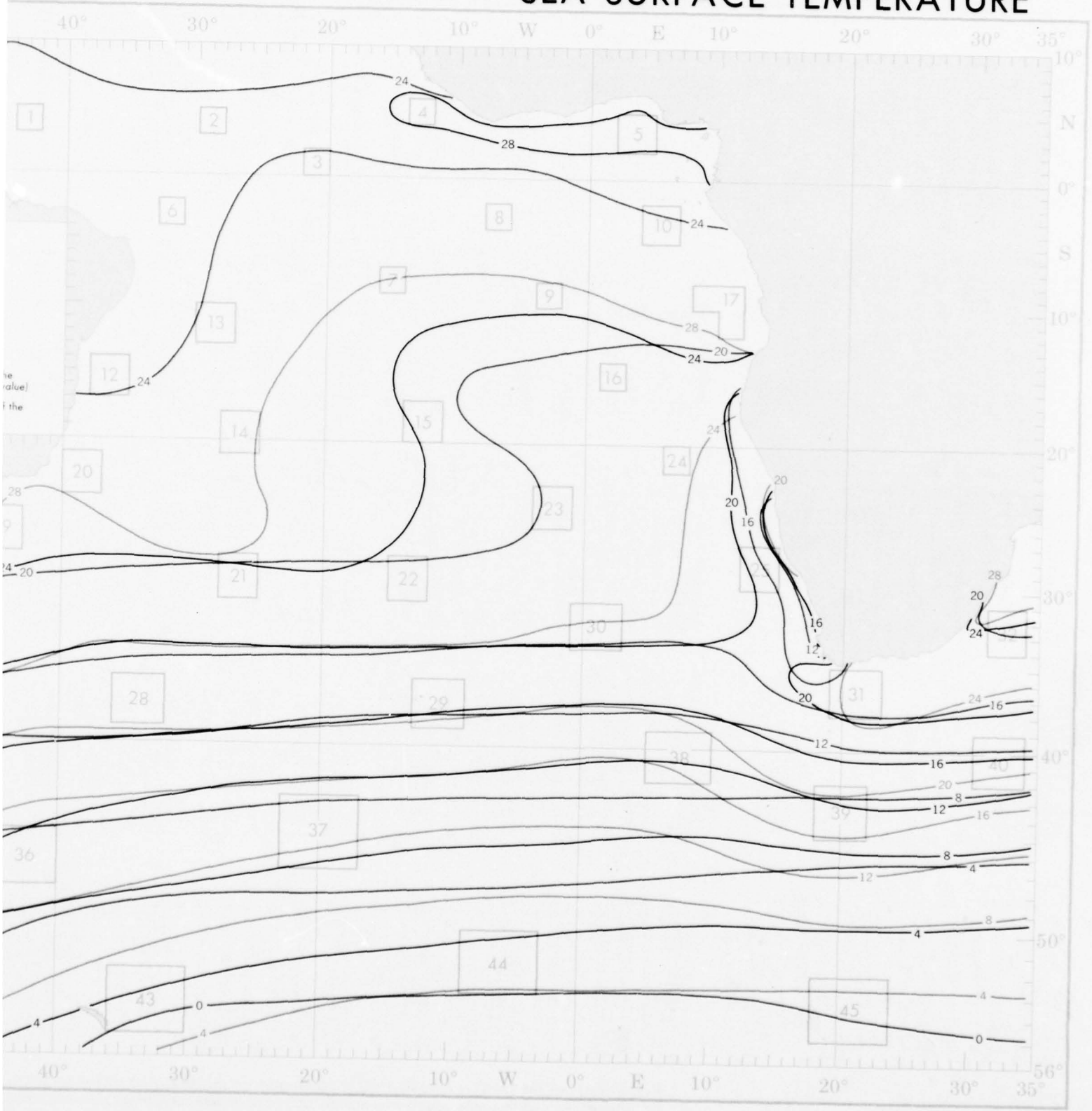
S- Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

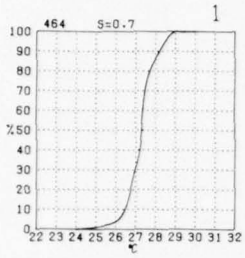
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

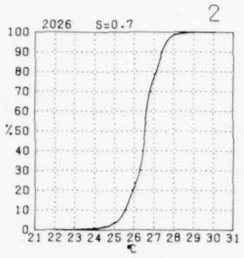
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

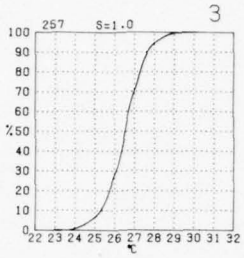
SEA SURFACE TEMPERATURE

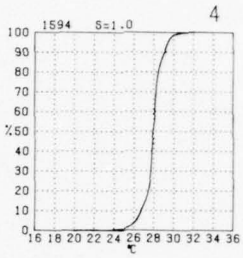


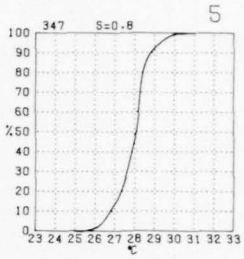
SEA SURFACE TEMPERATURE

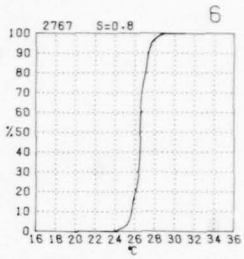


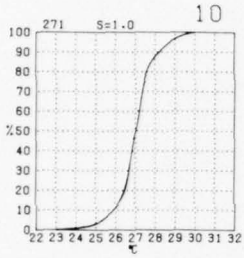


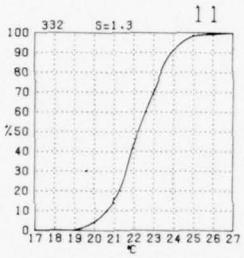


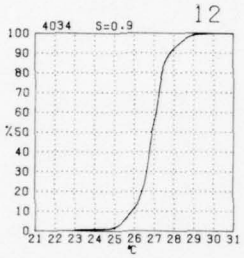


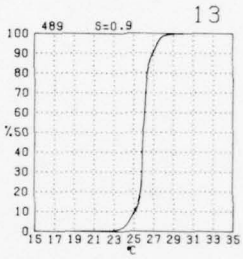


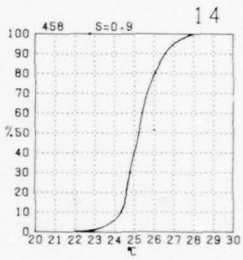


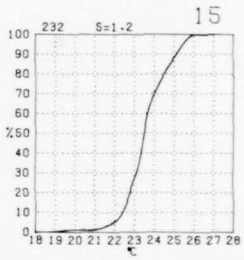


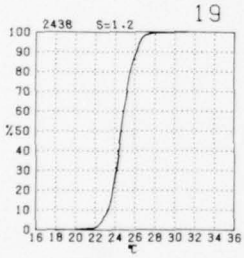


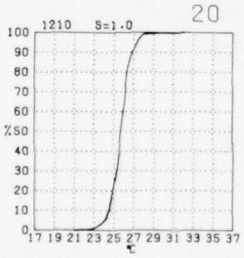


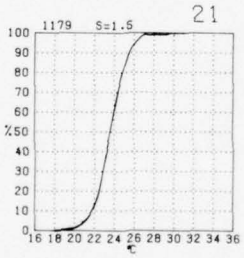


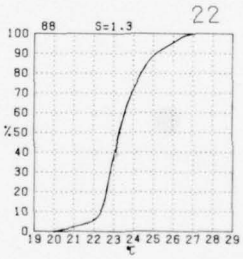


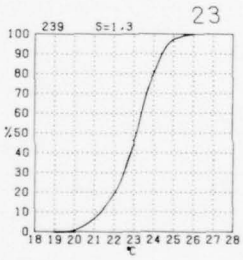


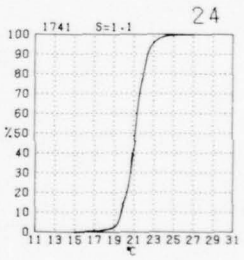


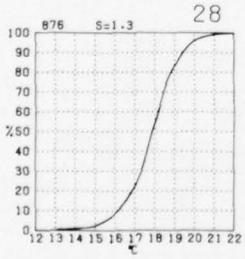


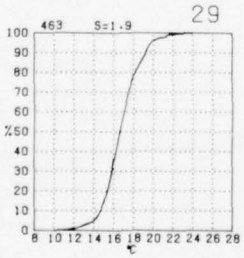


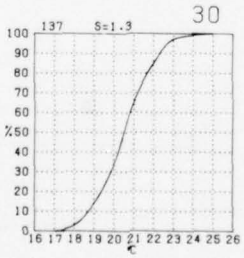


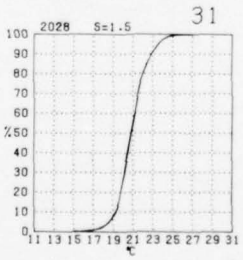


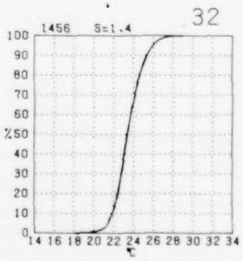


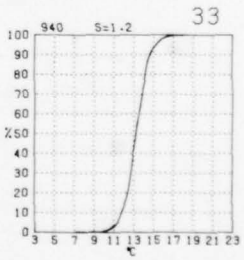


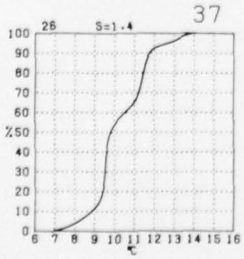


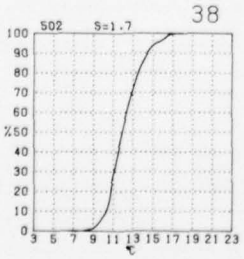


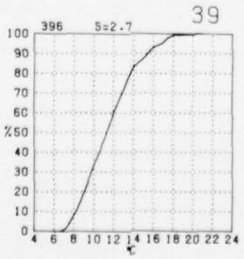


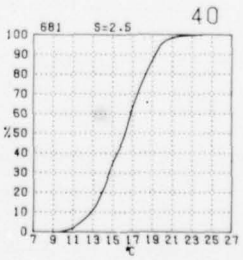


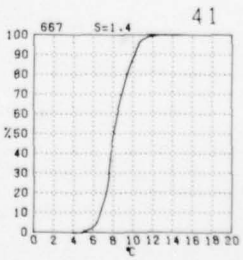


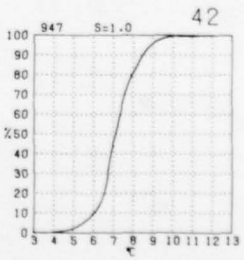




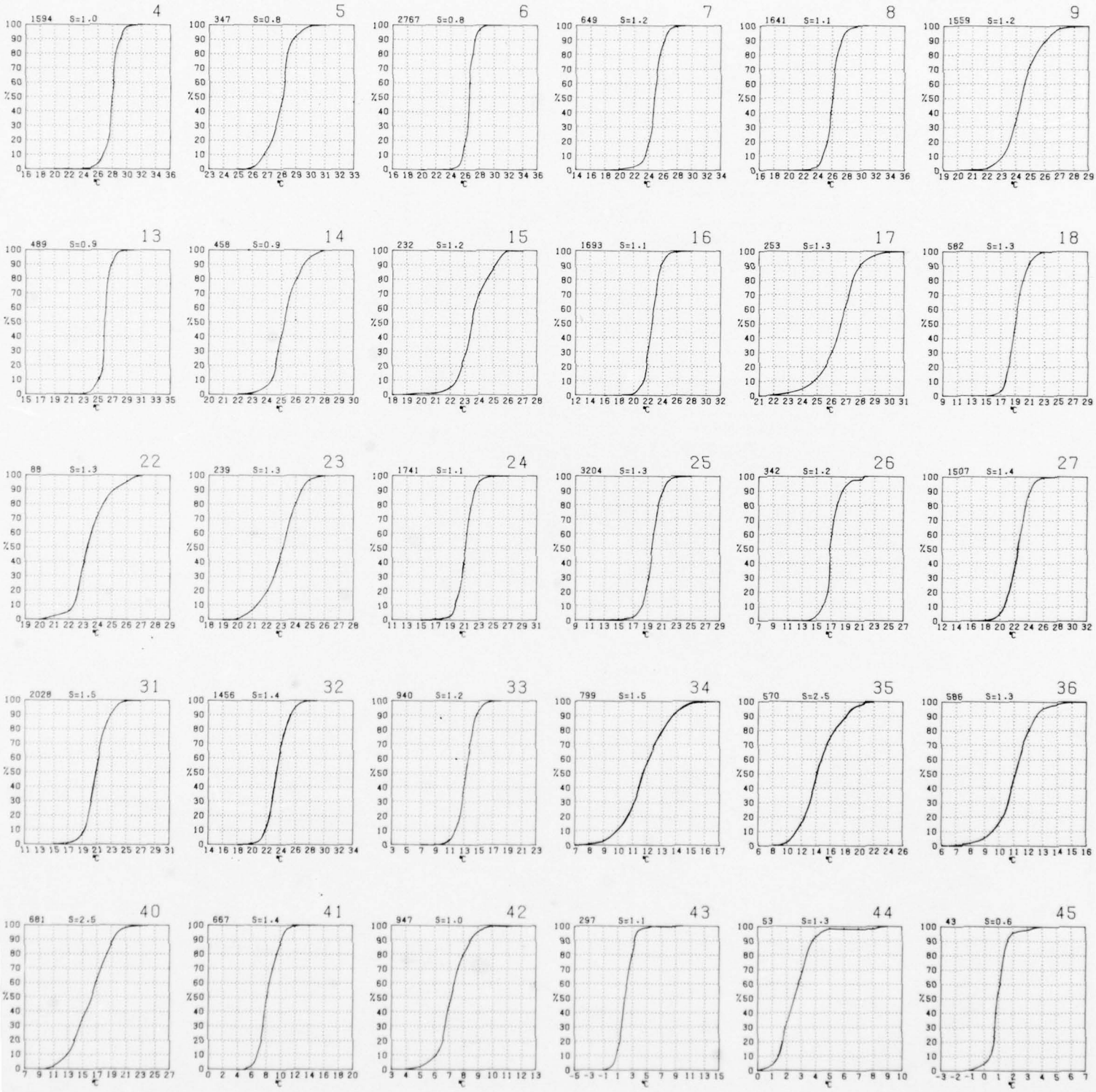






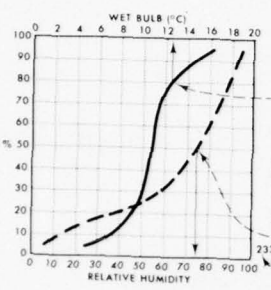


Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias



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JANUARY



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

(50% of all observed relative humidities were ≤74%.)

Number of observations.

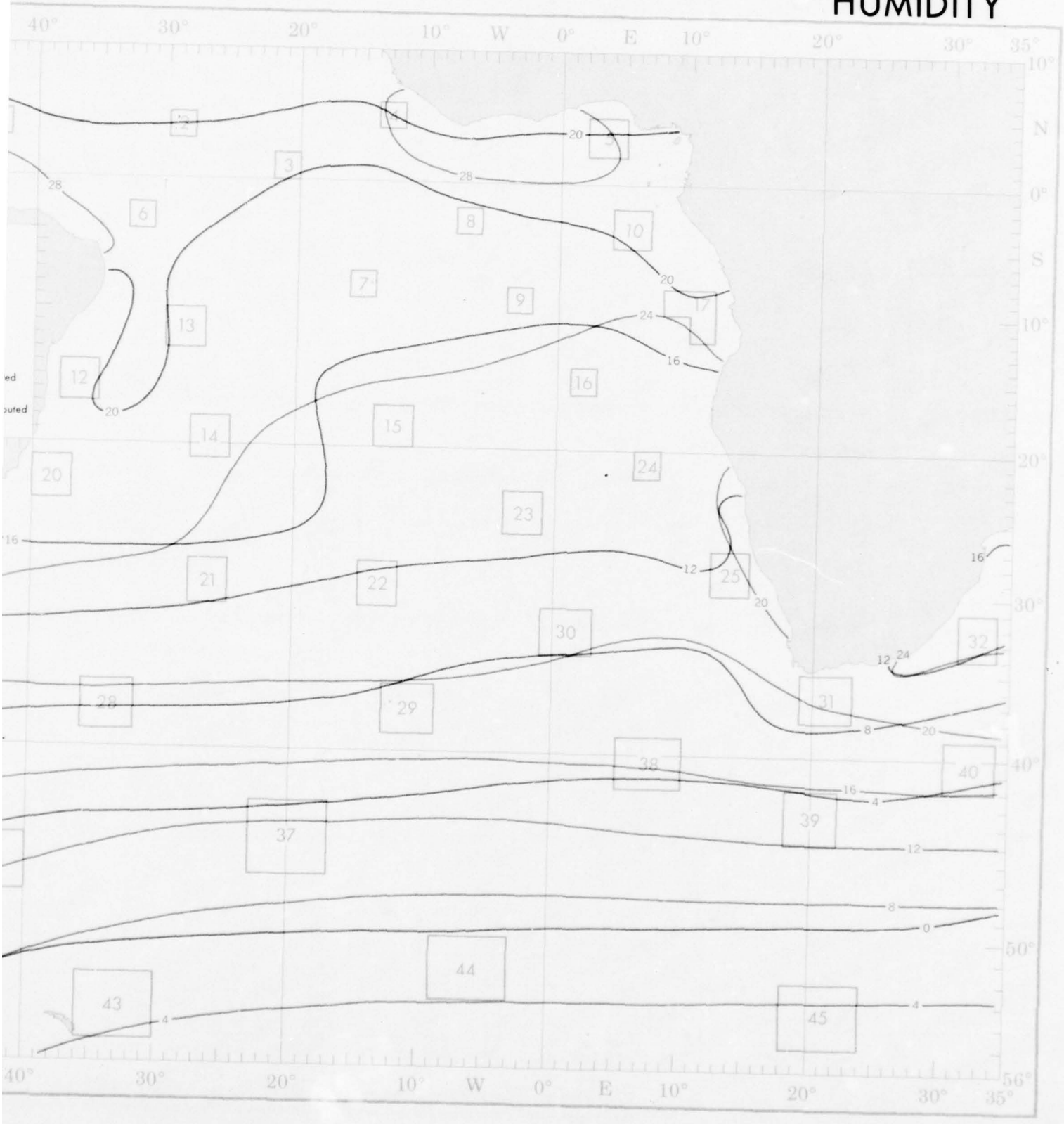
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

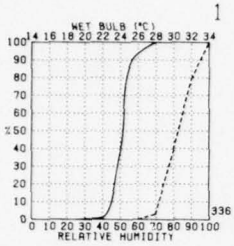
80° 70° 60° 50° 40° 30° 20° 10° W 0°

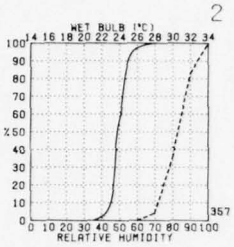
10° N 0° S 10° 20° 30° 40° 50° 56°

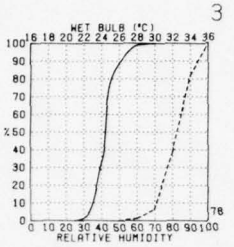
HUMIDITY

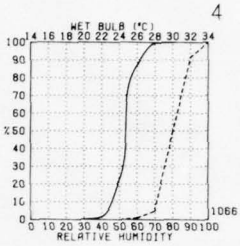

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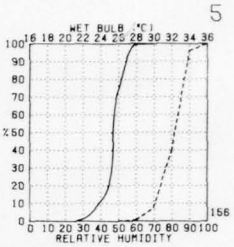
WET BULB AND RELATIVE HUMIDITY

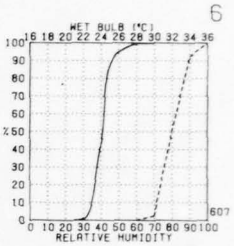


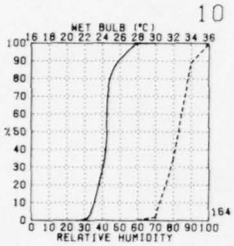


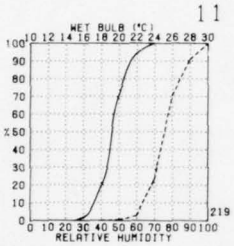


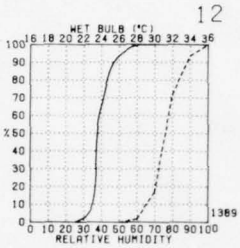


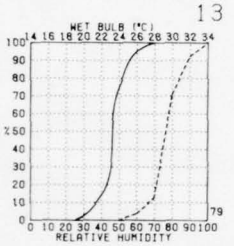


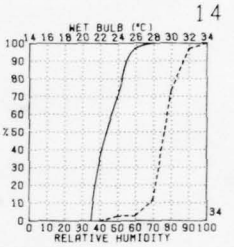


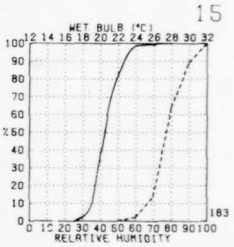


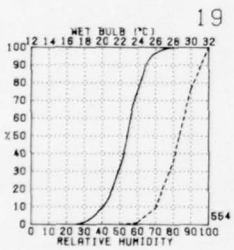


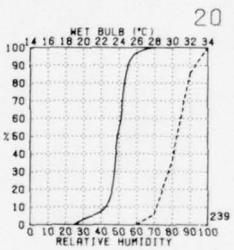


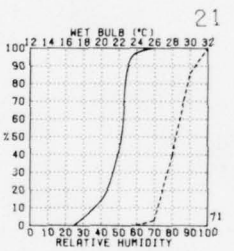


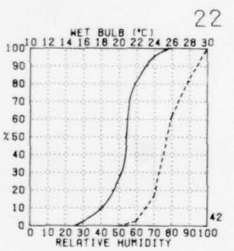


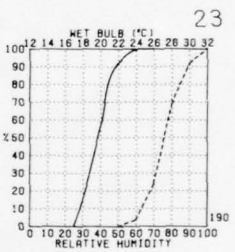


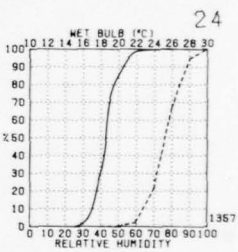


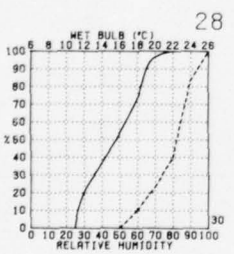


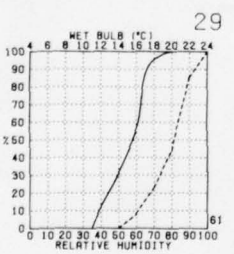


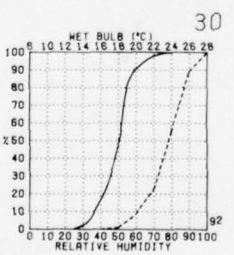


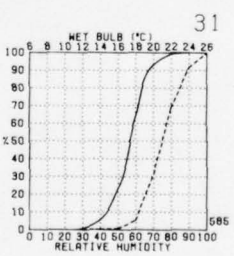


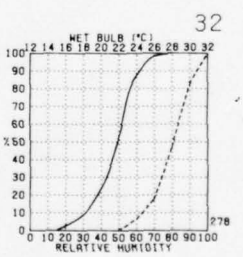


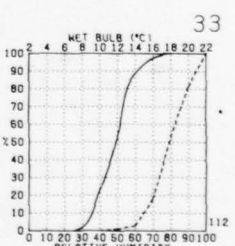


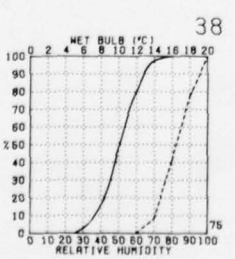


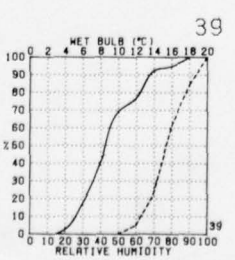


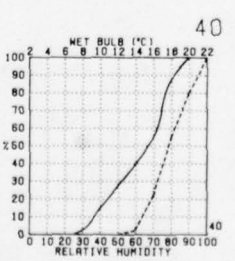


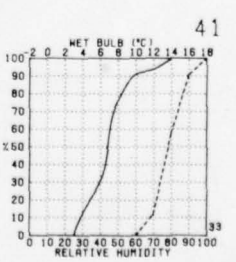


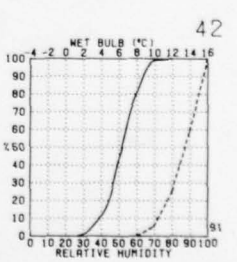










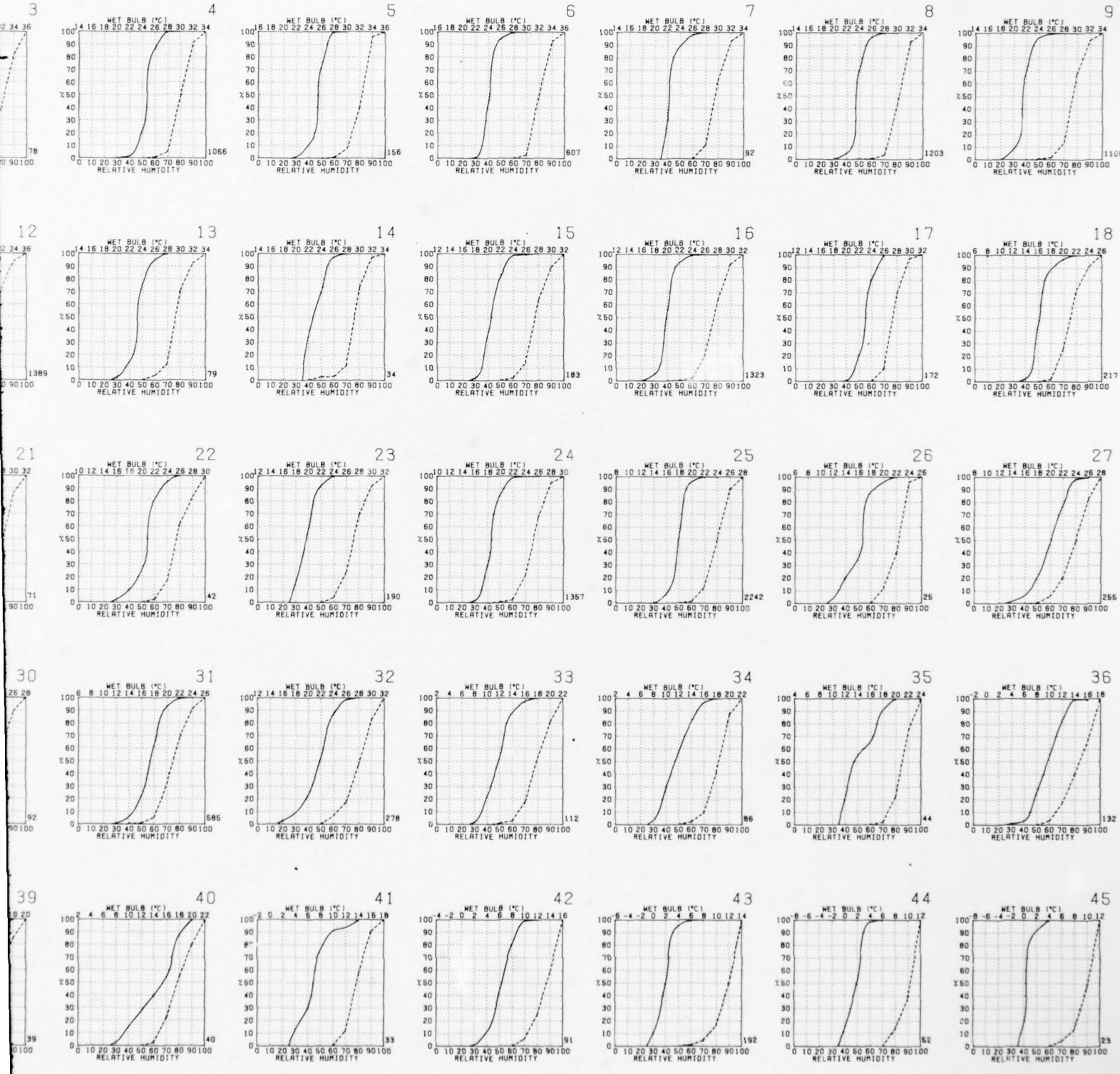


INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

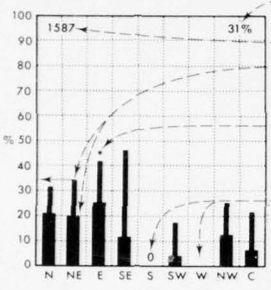
VE HUMIDITY

JANUARY



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JANUARY



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

(*34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.*)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

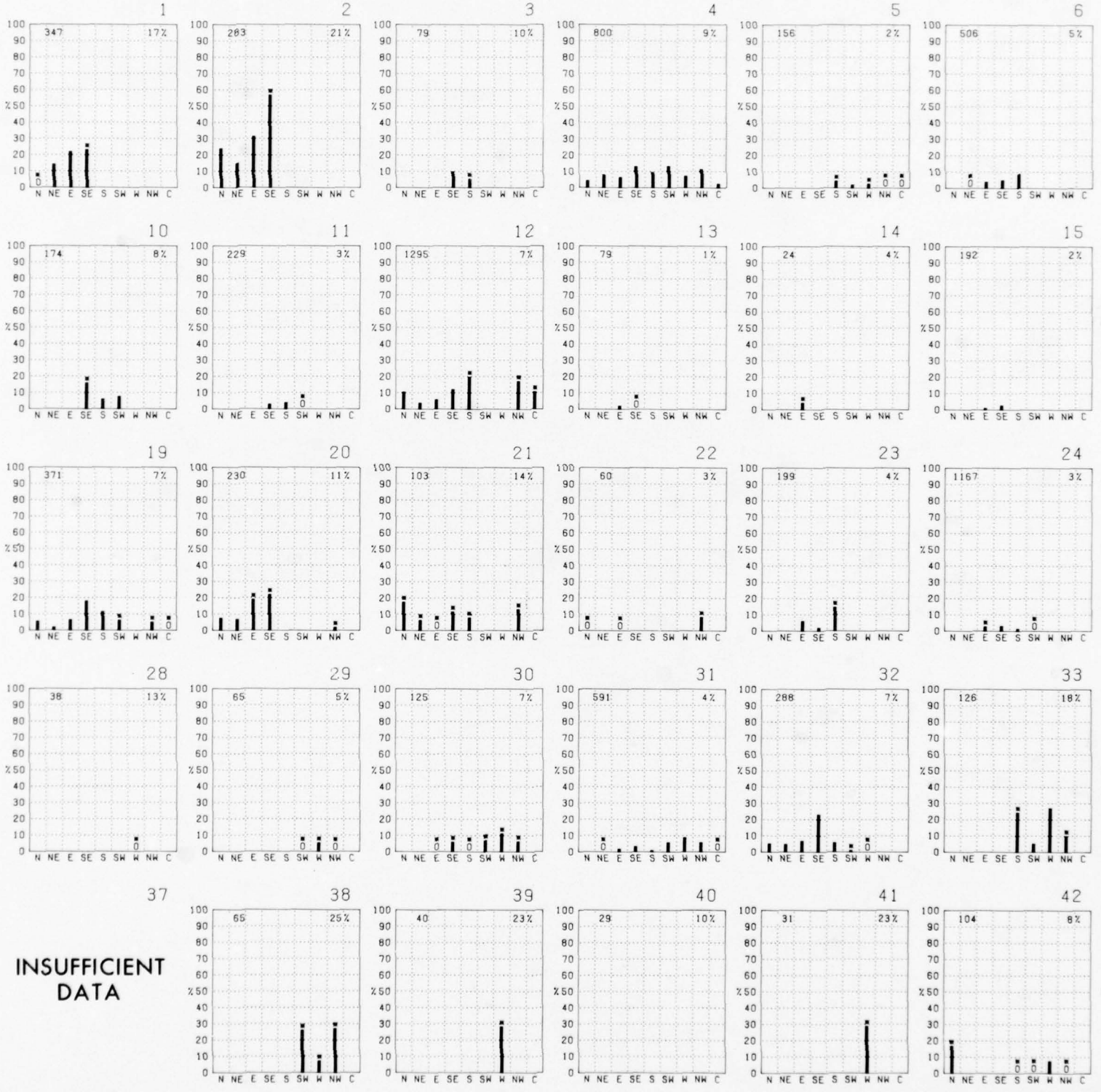
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

RED LINE - Percent frequency of observations reporting precipitation

PRECIPITATION



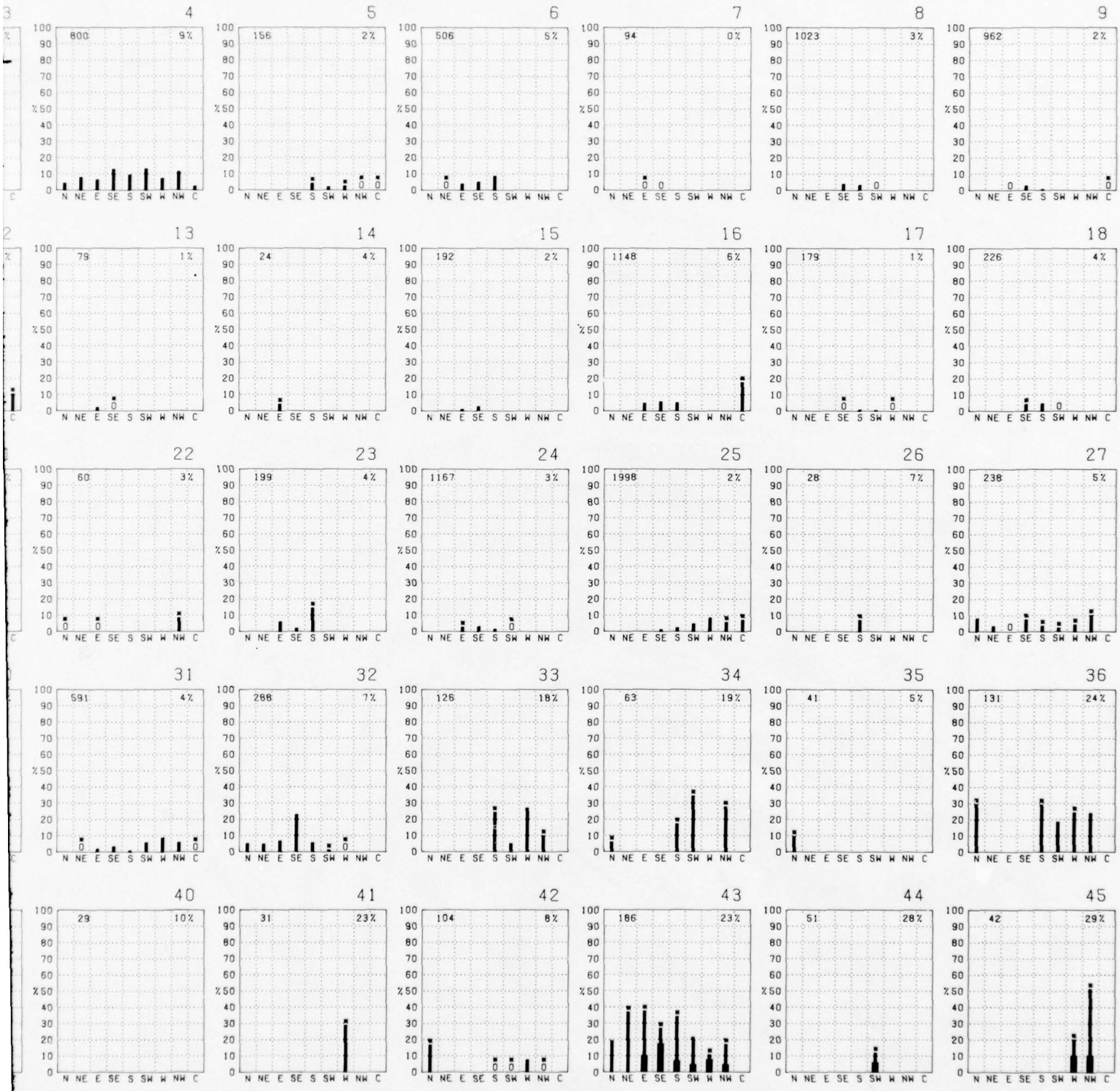
PRECIPITATION



INSUFFICIENT DATA

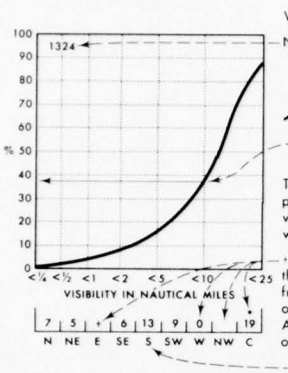
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JANUARY



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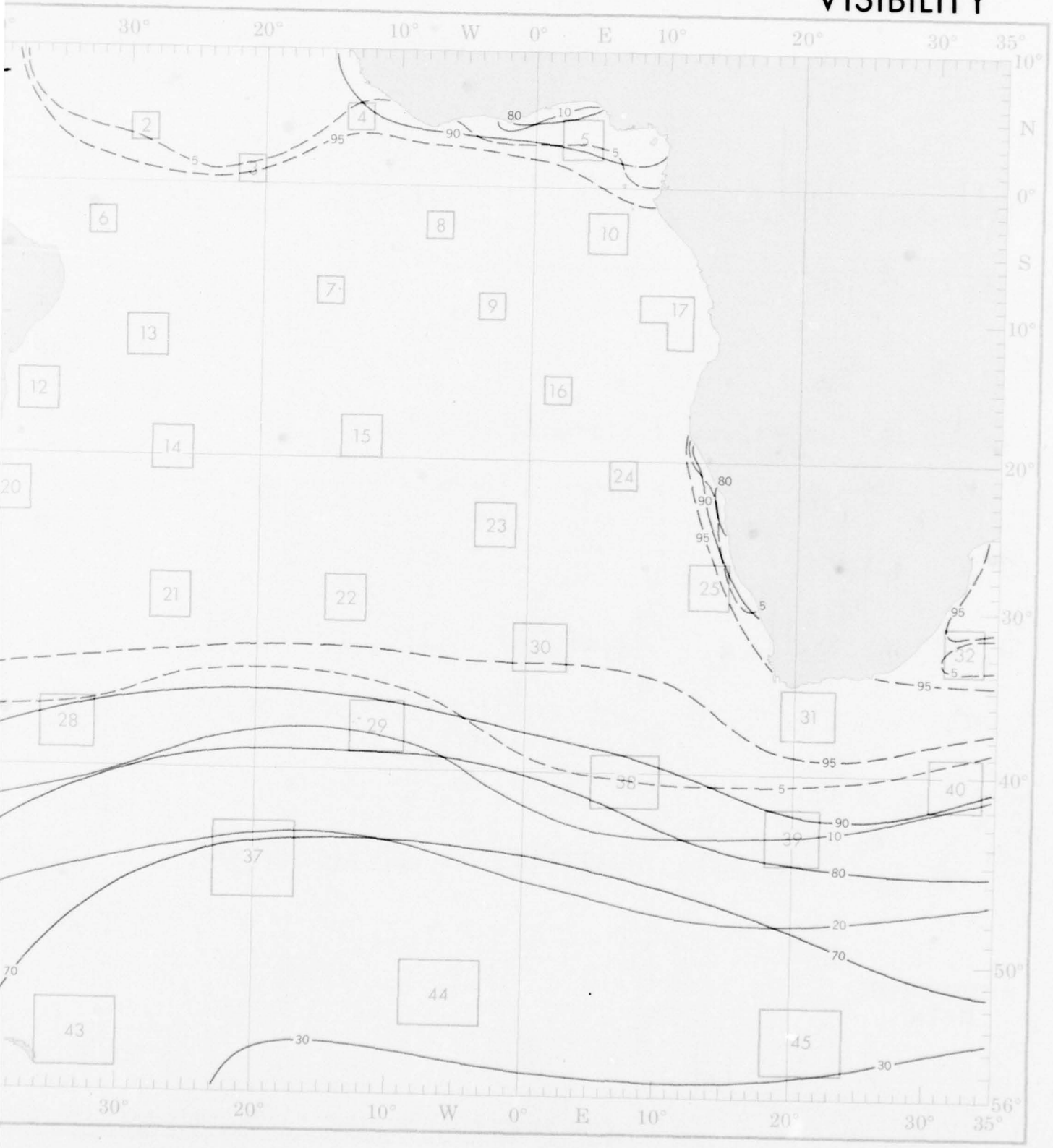
JANUARY



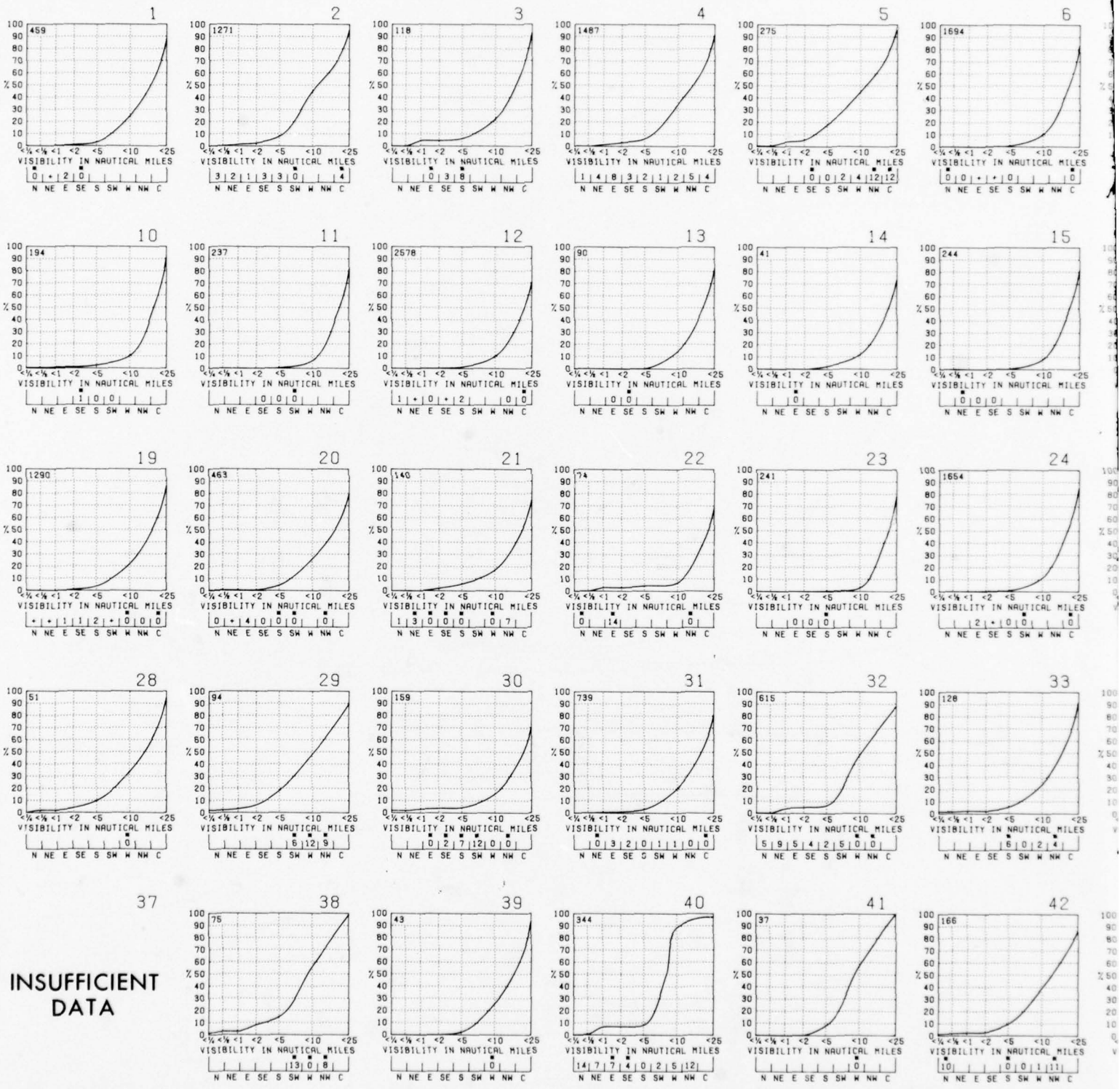
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

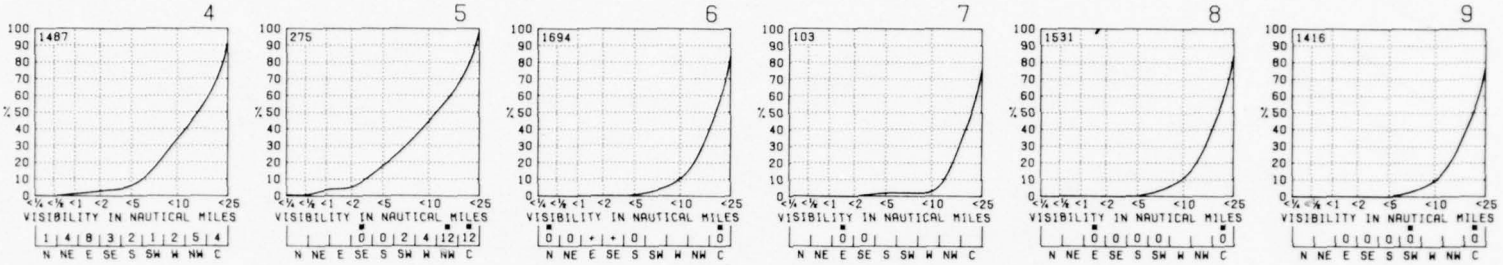

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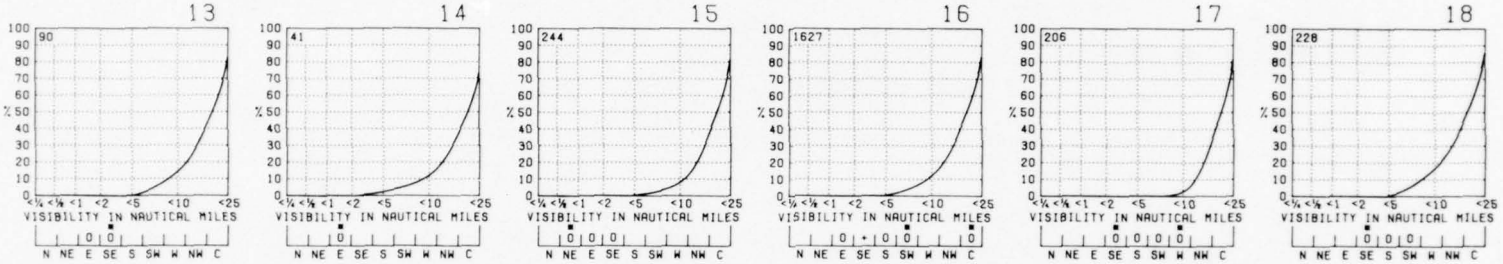
VISIBILITY

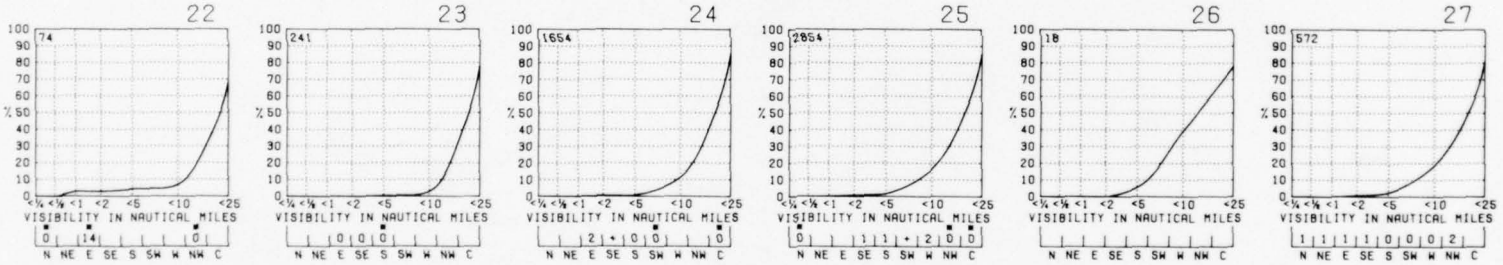


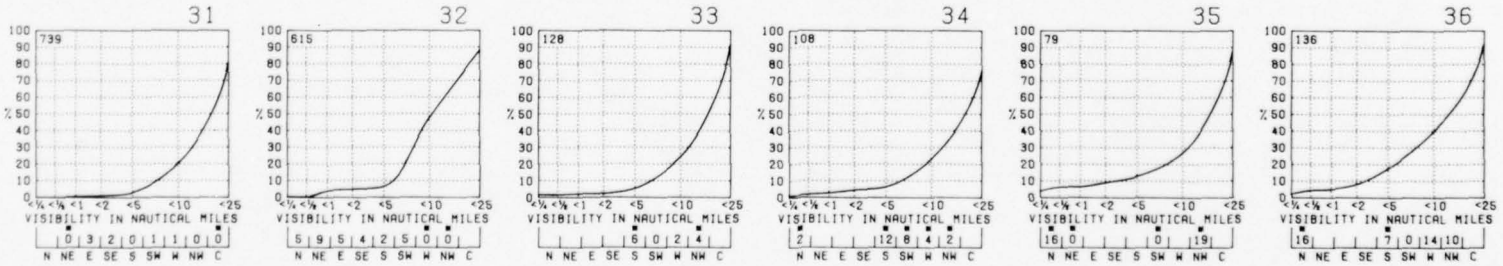
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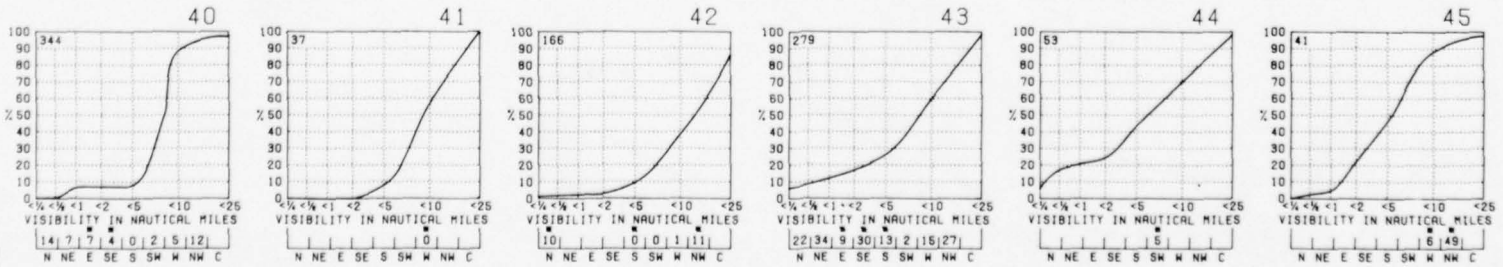
JANUARY





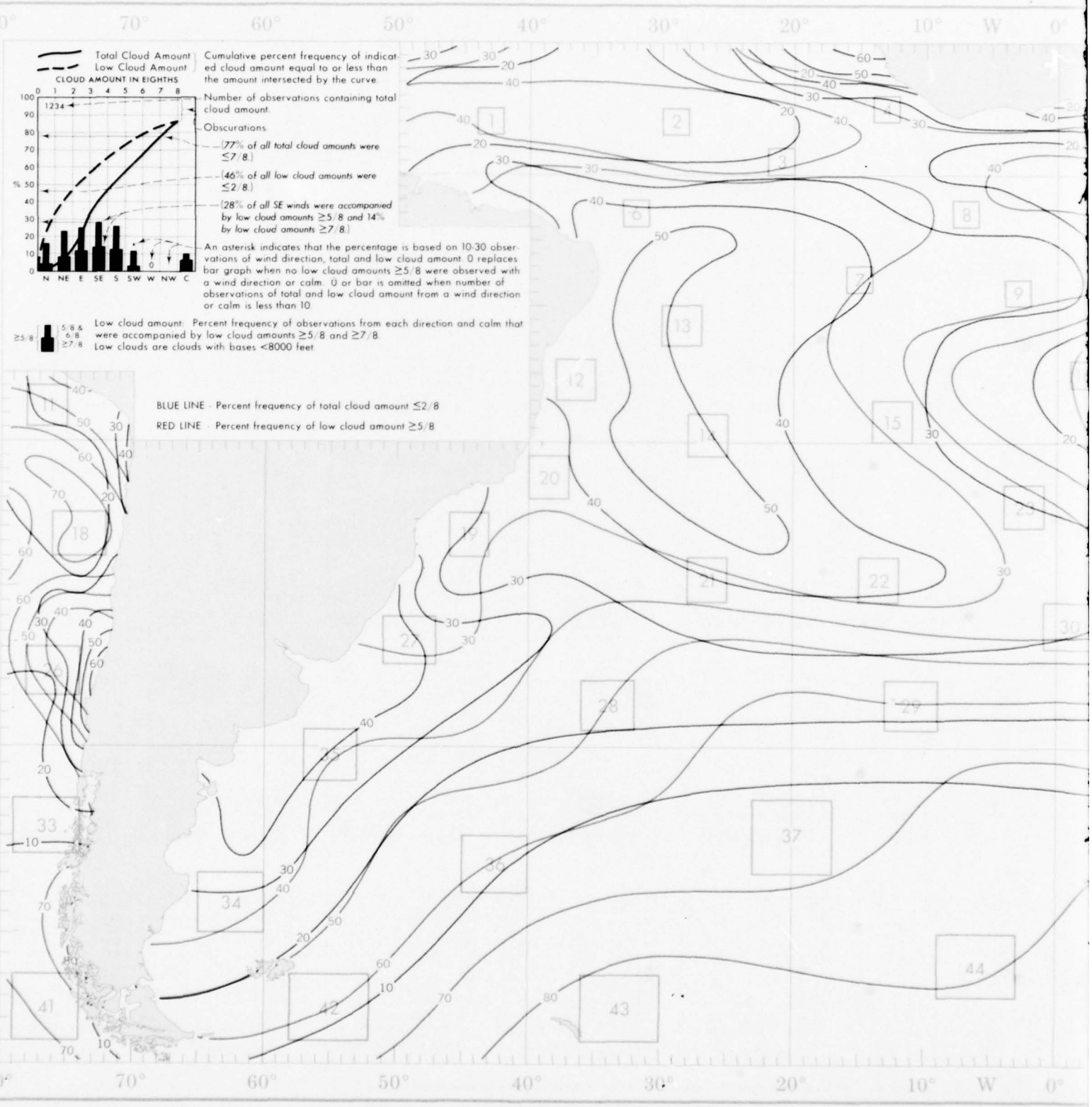




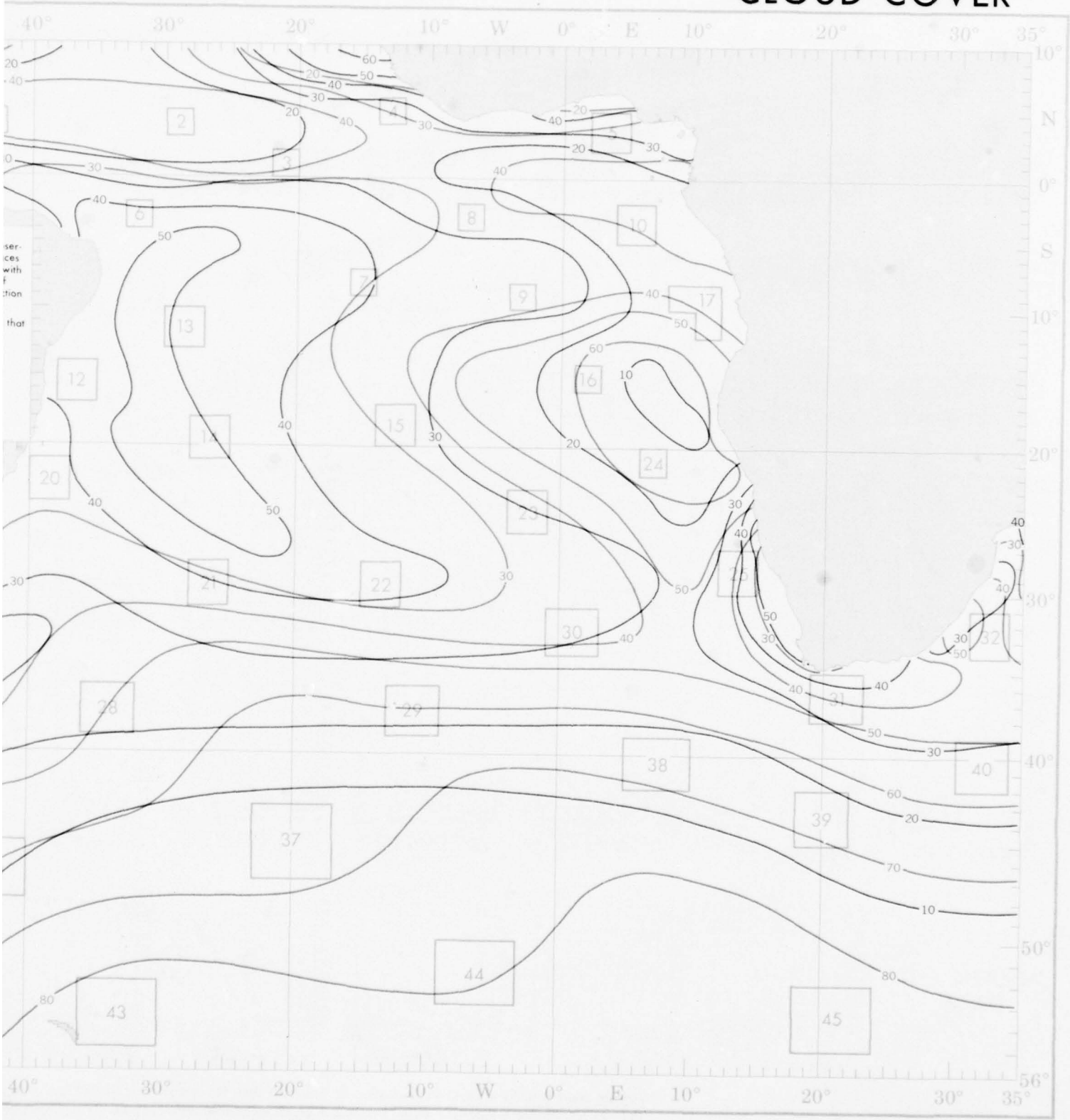


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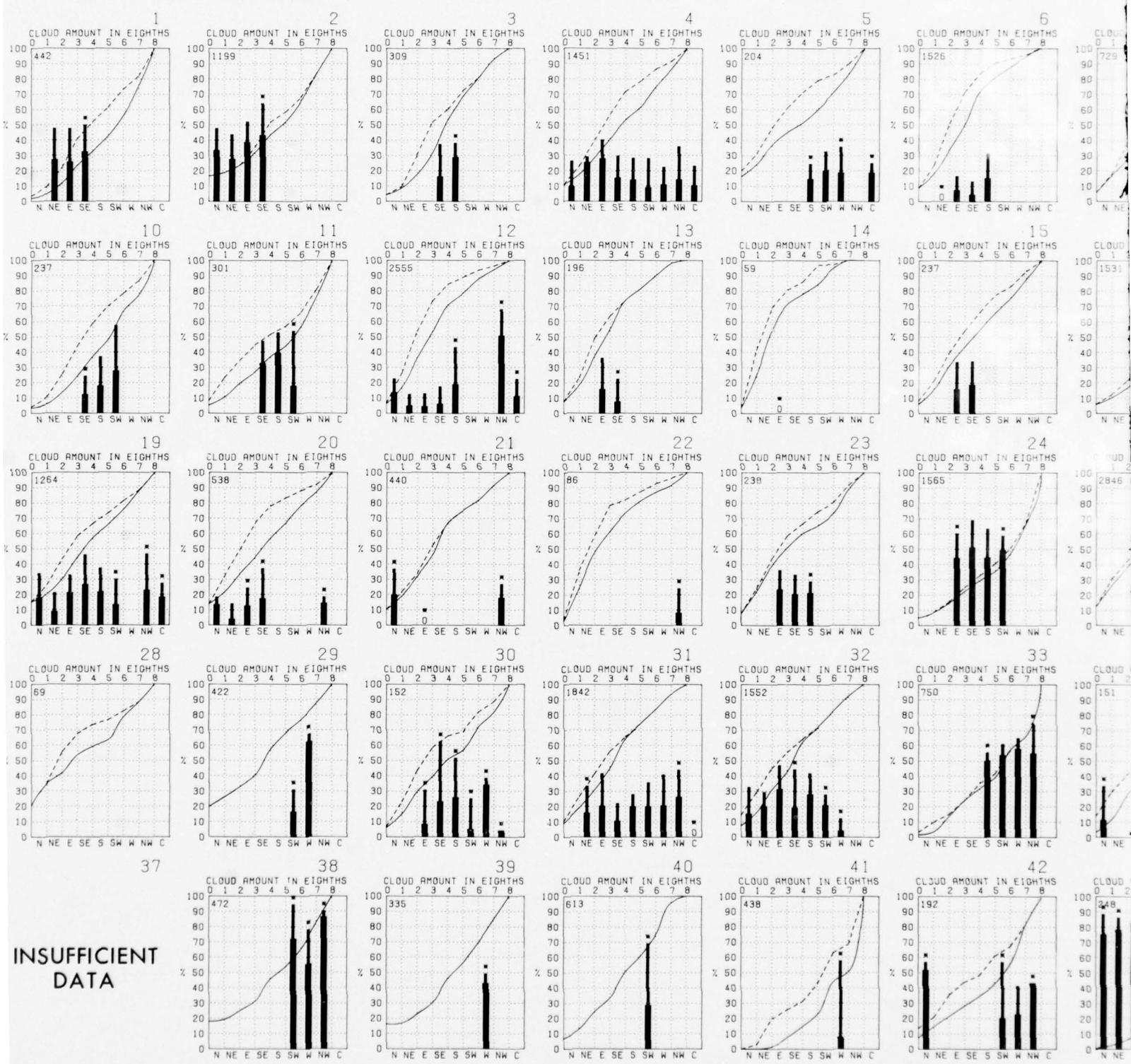
JANUARY


Total Cloud Amount
Low Cloud Amount
CLOUD AMOUNT IN EIGHTHS
0 1 2 3 4 5 6 7 8
1234
100
90
80
70
60
% 50
40
30
20
10
0
0
N NE E SE S SW W NW C
Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.
Number of observations containing total cloud amount.
Obscurations
(77% of all total cloud amounts were ≤7/8.)
(46% of all low cloud amounts were ≤2/8.)
(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)
An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.
≥5/8
5/8 & 6/8
≥7/8
Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.
BLUE LINE - Percent frequency of total cloud amount ≤2/8
RED LINE - Percent frequency of low cloud amount ≥5/8
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44

CLOUD COVER


40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
2
3
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6
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44
45
60
50
40
30
20
10
70
80

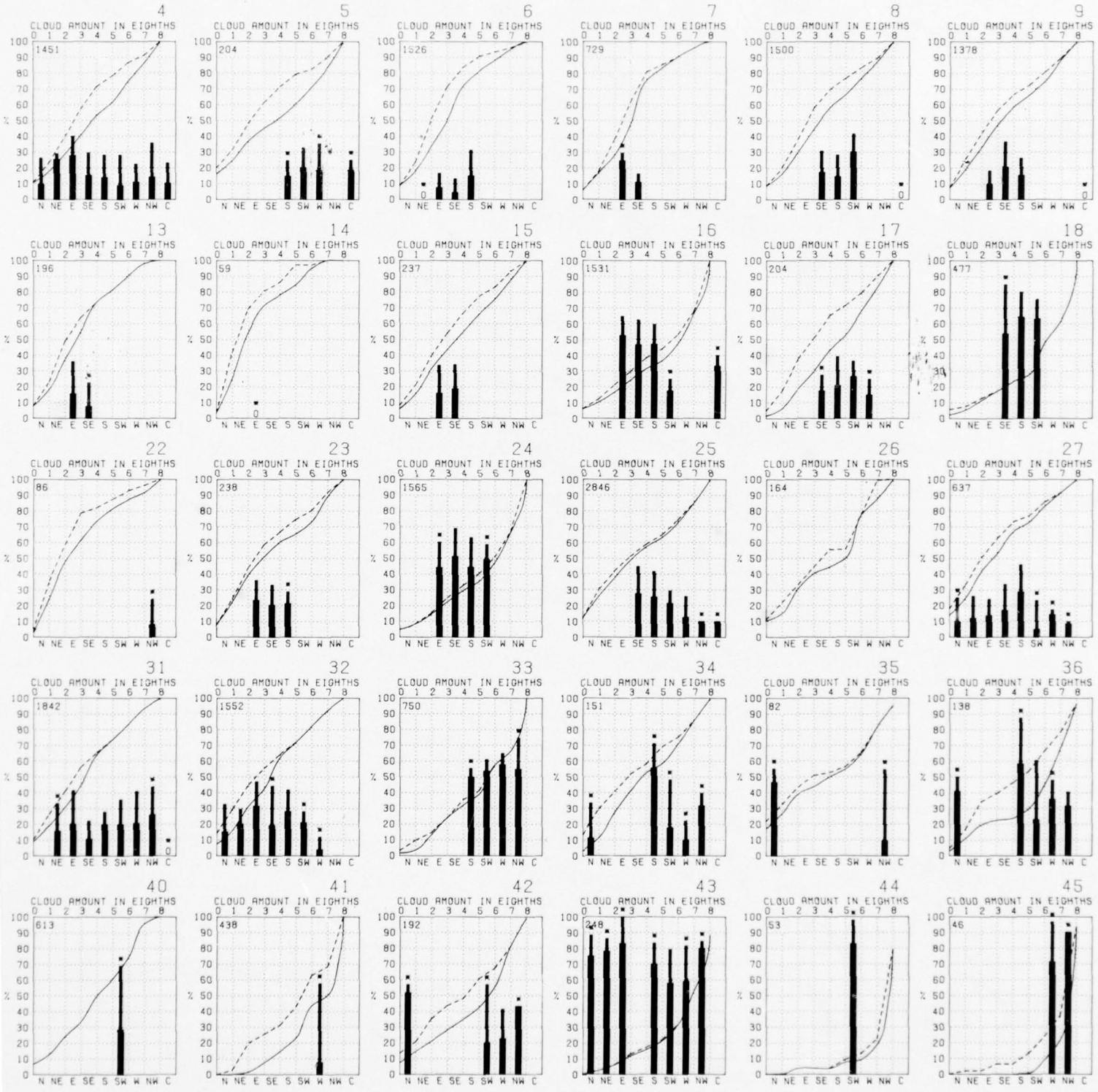
CLOUD COVER



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was

JANUARY



he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

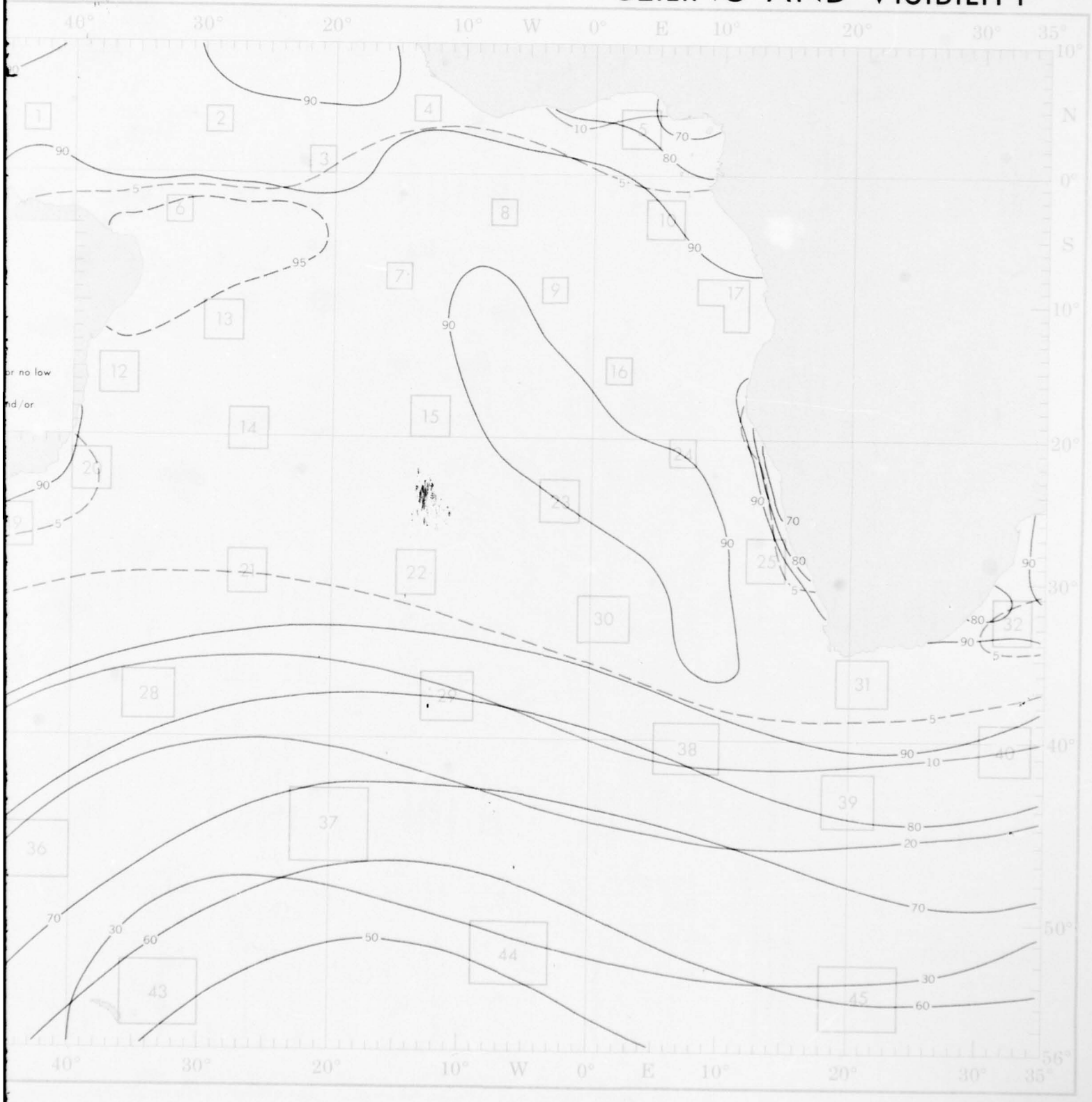
JANUARY



LOW CLOUD CEILING	<½	½-<1	1-<2	2-<3	3-<5	5-<10	≥10
N C	0	0	+	3	13	64	
30-<80	0	0	0	0	+	1	
35-<50	0	+	0	0	0	4	
20-<35	0	+	1	1	2	2	
10-<20	0	+	1	1	2	1	
6-<10	0	1	0	+	+	0	
3-<6	+	+	0	+	+	0	
1.5-<3	+	0	0	0	0	0	
0-<1.5	+	0	0	0	0	0	

334

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	49
50<80	0	0	0	0	+	0
35<50	0	0	0	0	0	2
20<35	0	0	0	+	2	7
10<20	0	0	+	1	5	15
6<10	0	0	0	0	2	8
3<6	0	0	+	1	2	2
1.5<3	0	0	0	+	0	0
0<1.5	0	+	0	0	+	0

331

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	7	46
50<80	0	0	0	0	+	+
35<50	0	0	0	0	1	3
20<35	0	0	0	1	1	10
10<20	0	0	0	1	2	12
6<10	0	0	0	1	2	10
3<6	0	0	+	0	1	1
1.5<3	0	+	0	0	+	
0<1.5	0	0	+	0	0	0

313

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	61
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	9
10<20	0	0	0	0	1	5
6<10	0	0	0	0	1	12
3<6	0	0	0	0	3	1
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	0	0

75

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	1	11	61
50<80	0	0	0	0	+	1
35<50	0	0	0	+	+	1
20<35	0	0	+	+	1	4
10<20	0	0	0	+	2	9
6<10	0	0	0	+	2	4
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

919

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	1	1	5	14	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	3
20<35	0	0	0	0	6	4
10<20	0	0	0	1	1	6
6<10	0	0	0	0	1	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

156

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	82
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	1
20<35	0	0	0	0	0	3
10<20	0	0	0	+	1	6
6<10	0	0	0	0	1	2
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

551

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	55
50<80	0	0	0	0	0	1
35<50	0	1	0	1	0	4
20<35	0	0	0	0	1	8
10<20	0	0	0	1	2	12
6<10	0	0	0	0	1	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

170

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	49
50<80	0	0	0	0	0	3
35<50	0	0	0	+	0	5
20<35	0	0	0	0	+	14
10<20	0	0	0	0	0	17
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

205

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	81
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	+	+	1	3
10<20	0	0	0	+	1	5
6<10	0	0	0	0	1	2
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	+	0

1363

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	68
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	10
10<20	0	0	0	0	2	6
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	2	0
0<1.5	0	0	0	0	0	0

63

14

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	82
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	5
10<20	0	0	0	0	5	5
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

22

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	65
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	6
10<20	0	0	0	0	1	14
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

194

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	66
50<80	0	0	0	+	1	+
35<50	0	0	0	+	1	4
20<35	0	0	+	0	1	4
10<20	0	0	+	0	1	8
6<10	0	0	0	+	1	6
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

451

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	8	68
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	1
20<35	0	0	0	0	2	4
10<20	1	0	+	1	2	5
6<10	0	0	0	1	2	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

243

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	6	60
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	2	8
10<20	0	0	0	0	1	8
6<10	0	0	0	0	1	6
3<6	0	0	0	1	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

86

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	80
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	4
20<35	0	0	0	0	0	4
10<20	0	0	0	0	0	7
6<10	0	0	0	2	0	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

54

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	67
50<80	0	0	0	0	0	+
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	8
10<20	0	0	0	0	+	10
6<10	0	0	0	0	+	8
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

205

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	33
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	6
20<35	0	0	0	+	1	18
10<20	0	0	+	0	1	27
6<10	0	0	0	0	1	8
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1211

28

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	15	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	3	3	0	12
10<20	0	0	0	0	0	0
6<10	0	0	0	0	0	3
3<6	0	0	0	0	3	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	3	0	0

34

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	44
50<80	0	0	0	0	0	2
35<50	0	0	0	2	2	12
20<35	0	0	0	0	12	4
10<20	0	0	0	0	6	4
6<10	0	0	0	2	2	4
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

50

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	64
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	9
10<20	0	0	0	0	2	13
6<10	0	0	0	0	3	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

101

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	63
50<80	0	0	0	0	0	0
35<50	0	0	0	0	+	3
20<35	+	0	0	0	3	8
10<20	0	0	0	0	4	9
6<10	0	0	0	+	2	3
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	0

445

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	58
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	1	1	5
10<20	0	0	+	0	2	12
6<10	0	0	0	1	2	6
3<6	0	0	0	0	2	1
1.5<3	0	+	0	0	0	0
0<1.5	0	0	0	0	0	+

284

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	31
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	5
20<35	0	0	0	0	4	6
10<20	0	0	0	2	4	13
6<10	0	0	0	0	4	12
3<6	0	0	0	2	1	6
1.5<3	1	0	0	0	0	0
0<1.5	0	1	0	0	1	0

112

37

INSUFFICIENT DATA

38

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	8
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	5
20<35	0	0	0	0	5	11
10<20	0	0	1	4	25	19
6<10	0	0	4	3	4	0
3<6	1	0	0	0	1	0
1.5<3	1	0	0	0	0	0
0<1.5	0	0	0	0	0	0

73

39

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	36
50<80	0	0	0	0	5	0
35<50	0	0	0	0	3	3
20<35	0	0	0	0	0	21
10<20	0	0	0	3	8	10
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	3

39

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	24
50<80	0	0	3	14	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	3	14
10<20	0	0	0	0	7	14
6<10	0	0	0	0	3	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

29

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	14	17
50<80	0	0	0	0	0	3
35<50	0	0	0	0	3	3
20<35	0	0	0	0	9	0
10<20	0	0	0	3	11	20
6<10	0	0	0	0	6	3
3<6	0	0	0	0	3	0
1.5<3	0	0	0	3	3	0
0<1.5	0	0	0	0	0	0

35

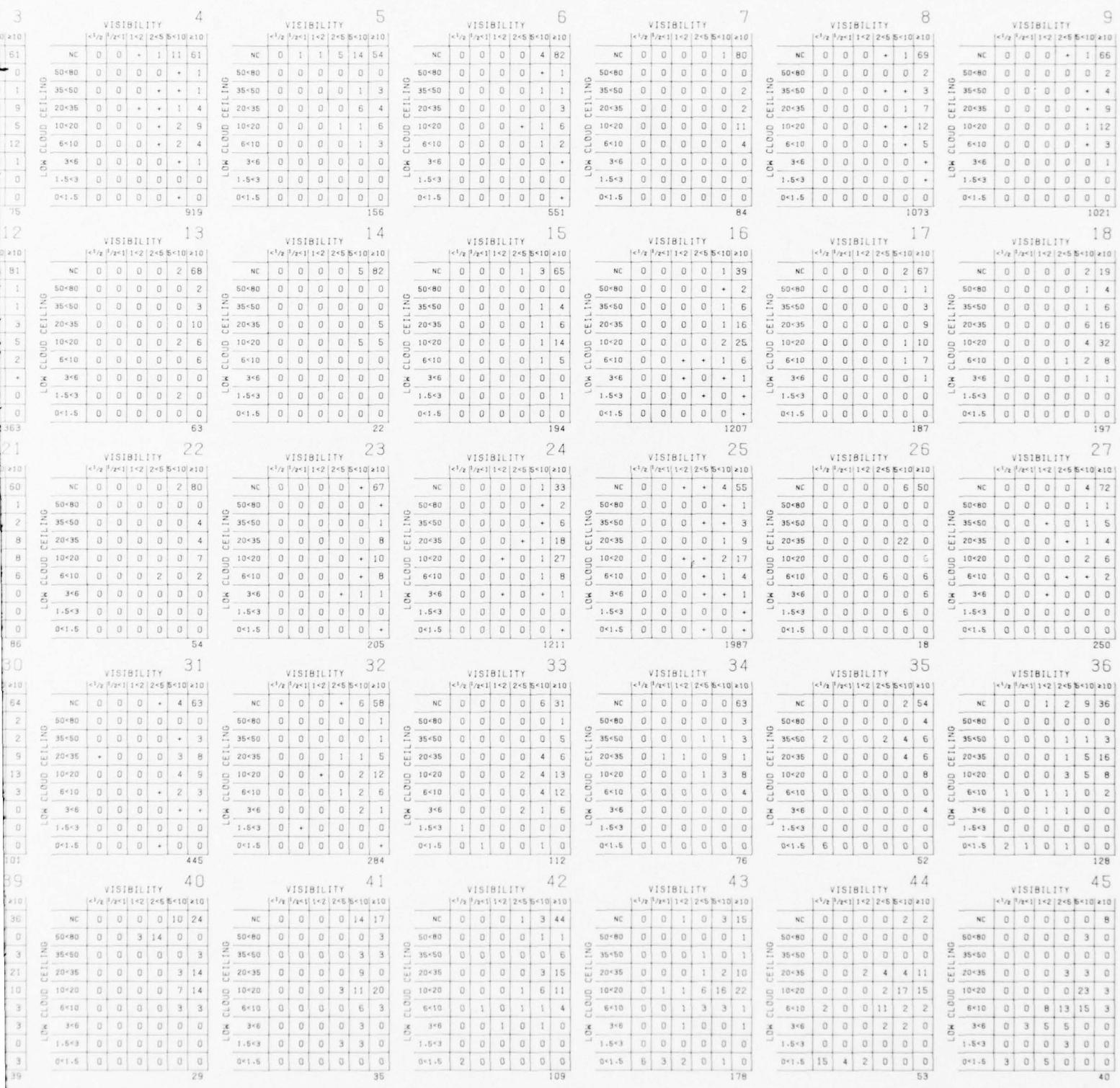
42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	44
50<80	0	0	0	0	1	1
35<50	0	0	0	0	0	6
20<35	0	0	0	0	3	15
10<20	0	0	0	1	6	11
6<10	0	1	0	1	1	4
3<6	0	0	1	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	0	0	0

109

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

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ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

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WIND



WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	+	1	5	+	0
VSBY <2	0	0	1	0	0
<10 & OR <2	+	2	13	1	0
<20 & OR <5	+	5	28	3	0
VSBY ≥5	1	25	65	6	+
≥50 & ≥5	1	17	32	3	+
NC & ≥10	1	16	29	3	+

330

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	9	5	0	0
<20 & OR <5	3	18	11	0	0
VSBY ≥5	8	55	32	1	0
≥50 & ≥5	4	33	17	+	0
NC & ≥10	4	28	14	+	0

311

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	3	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	5	10	4	0	0
<20 & OR <5	5	15	5	0	0
VSBY ≥5	15	59	26	0	0
≥50 & ≥5	10	37	18	0	0
NC & ≥10	10	36	16	0	0

73

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	2	4	+	0	0
<20 & OR <5	6	12	1	0	0
VSBY ≥5	36	58	4	0	0
≥50 & ≥5	29	43	2	0	0
NC & ≥10	23	37	2	0	0

883

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	1	0	0	0	0
<10 & OR <2	1	3	0	0	0
<20 & OR <5	7	9	3	0	0
VSBY ≥5	29	54	9	0	0
≥50 & ≥5	24	40	5	0	0
NC & ≥10	16	35	4	0	0

153

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥3
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	+	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	1	0	0
<20 & OR <5	1	6	3	0	0
VSBY ≥5	4	57	39	+	0
≥50 & ≥5	3	48	35	+	0
NC & ≥10	3	46	33	0	0

548

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	8	2	0	0
<20 & OR <5	1	19	5	0	0
VSBY ≥5	6	72	21	0	0
≥50 & ≥5	4	45	12	0	0
NC & ≥10	4	42	10	0	0

167

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	2	0	0
<20 & OR <5	2	13	10	0	0
VSBY ≥5	8	58	33	1	0
≥50 & ≥5	3	35	17	1	0
NC & ≥10	3	30	15	1	0

205

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	2	+	0
<20 & OR <5	1	6	5	+	0
VSBY ≥5	6	62	30	1	0
≥50 & ≥5	5	55	24	+	0
NC & ≥10	5	53	23	+	0

1350

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	5	0	0
<20 & OR <5	0	6	10	0	0
VSBY ≥5	3	37	60	0	0
≥50 & ≥5	3	24	44	0	0
NC & ≥10	3	21	44	0	0

62

14

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	10	0	0	0
VSBY ≥5	0	48	52	0	0
≥50 & ≥5	0	38	52	0	0
NC & ≥10	0	33	52	0	0

21

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	2	0	0
<20 & OR <5	1	10	11	0	0
VSBY ≥5	2	51	46	0	0
≥50 & ≥5	2	38	28	0	0
NC & ≥10	2	36	27	0	0

192

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	1	+	+
VSBY <2	0	0	0	+	+
<10 & OR <2	+	3	5	1	+
<20 & OR <5	1	8	9	2	+
VSBY ≥5	7	45	44	3	0
≥50 & ≥5	5	35	29	1	0
NC & ≥10	5	34	27	1	0

441

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	2	5	0	0
<20 & OR <5	0	6	9	1	0
VSBY ≥5	3	39	48	5	0
≥50 & ≥5	2	30	39	5	0
NC & ≥10	2	28	35	4	0

240

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	4	1	0
<20 & OR <5	5	7	7	1	0
VSBY ≥5	13	42	40	2	0
≥50 & ≥5	9	32	26	1	0
NC & ≥10	7	29	24	1	0

85

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	.0	0	0
<10 & OR <2	0	2	2	0	0
<20 & OR <5	2	6	4	0	0
VSBY ≥5	16	61	18	4	0
≥50 & ≥5	14	49	16	4	0
NC & ≥10	14	49	16	2	0

51

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	8	+	0
<20 & OR <5	+	7	14	1	0
VSBY ≥5	5	48	43	3	0
≥50 & ≥5	4	38	24	2	0
NC & ≥10	4	37	24	2	0

203

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	6	1	0
<20 & OR <5	1	9	26	3	+
VSBY ≥5	2	29	63	6	+
≥50 & ≥5	1	11	21	2	0
NC & ≥10	1	10	19	2	0

1202

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	3	0
<6 & OR <2	0	3	0	6	0
VSBY <2	0	3	0	0	0
<10 & OR <2	0	3	3	6	0
<20 & OR <5	0	3	10	6	0
VSBY ≥5	10	29	39	10	0
≥50 & ≥5	10	26	32	0	0
NC & ≥10	6	23	23	0	0

31

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	2
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	2	2	2
<20 & OR <5	2	6	8	4	2
VSBY ≥5	6	33	52	2	0
≥50 & ≥5	0	17	33	0	0
NC & ≥10	0	15	31	0	0

48

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	2	0	0
<20 & OR <5	1	8	10	2	0
VSBY ≥5	9	54	31	6	0
≥50 & ≥5	8	38	17	4	0
NC & ≥10	7	37	16	3	0

99

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	3	1	1
<20 & OR <5	1	3	8	5	1
VSBY ≥5	7	34	41	15	3
≥50 & ≥5	6	27	26	7	2
NC & ≥10	6	25	25	6	1

440

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	+	1	2	+	+
VSBY <2	0	0	+	0	+
<10 & OR <2	+	4	6	1	1
<20 & OR <5	1	9	14	4	1
VSBY ≥5	7	33	45	11	2
≥50 & ≥5	6	21	30	7	1
NC & ≥10	5	19	28	6	1

280

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	1	0
<6 & OR <2	0	3	7	1	1
VSBY <2	0	1	1	0	0
<10 & OR <2	0	11	12	5	1
<20 & OR <5	0	15	23	6	1
VSBY ≥5	1	33	45	14	2
≥50 & ≥5	1	14	21	4	0
NC & ≥10	1	12	18	1	0

111

37

INSUFFICIENT DATA

38

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	1
<6 & OR <2	0	1	3	3	3
VSBY <2	0	1	1	3	3
<10 & OR <2	0	3	6	4	4
<20 & OR <5	0	6	28	24	6
VSBY ≥5	0	7	50	24	3
≥50 & ≥5	0	1	9	1	0
NC & ≥10	0	1	6	1	0

68

39

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	5	0	0
<20 & OR <5	0	0	14	14	0
VSBY ≥5	3	14	43	30	8
≥50 & ≥5	0	8	19	16	3
NC & ≥10	0	5	19	8	3

37

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	3	0
VSBY <2	0	0	0	3	0
<10 & OR <2	0	0	0	10	0
<20 & OR <5	0	7	7	28	3
VSBY ≥5	0	24	24	28	7
≥50 & ≥5	0	10	14	7	3
NC & ≥10	0	10	7	3	3

29

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	3	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	6	6	0
<20 & OR <5	0	3	22	19	3
VSBY ≥5	0	9	41	44	0
≥50 & ≥5	0	6	16	16	0
NC & ≥10	0	3	6	9	0

32

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	2	3	0	0
VSBY <2	0	2	2	0	0
<10 & OR <2	0	3	5	3	0
<20 & OR <5	0	4	19	6	0
VSBY ≥5	1	17	57	18	0
≥50 & ≥5	1	11	28	8	0
NC & ≥10	0	10	27	7	0

109

Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted when

IBILITY-WIND

JANUARY

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	2	4	+	0	0
<20 & OR <5	6	12	1	0	0
VSBY ≥5	36	58	4	0	0
≥50 & ≥5	29	43	2	0	0
NC & ≥10	23	37	2	0	0

883

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	1	0	0	0	0
<10 & OR <2	1	3	0	0	0
<20 & OR <5	7	9	3	0	0
VSBY ≥5	29	54	9	0	0
≥50 & ≥5	24	40	5	0	0
NC & ≥10	16	35	4	0	0

153

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	+	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	1	0	0
<20 & OR <5	1	6	3	0	0
VSBY ≥5	4	57	39	+	0
≥50 & ≥5	3	48	35	+	0
NC & ≥10	3	46	33	0	0

548

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	0	5	10	0	0
VSBY ≥5	4	48	49	0	0
≥50 & ≥5	4	40	37	0	0
NC & ≥10	2	40	37	0	0

84

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	2	0	0
<20 & OR <5	+	11	7	0	0
VSBY ≥5	4	63	33	0	0
≥50 & ≥5	3	46	23	0	0
NC & ≥10	3	45	22	0	0

1070

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	2	2	0	0
<20 & OR <5	1	10	7	0	0
VSBY ≥5	7	64	28	+	0
≥50 & ≥5	6	46	17	+	0
NC & ≥10	5	45	16	+	0

1017

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	5	0	0
<20 & OR <5	0	6	10	0	0
VSBY ≥5	3	37	60	0	0
≥50 & ≥5	3	24	44	0	0
NC & ≥10	3	21	44	0	0

62

14

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	10	0	0	0
VSBY ≥5	0	48	52	0	0
≥50 & ≥5	0	38	52	0	0
NC & ≥10	0	33	52	0	0

21

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	2	0	0
<20 & OR <5	1	10	11	0	0
VSBY ≥5	2	51	46	0	0
≥50 & ≥5	2	38	28	0	0
NC & ≥10	2	36	27	0	0

192

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	1	1	+	0	0
VSBY <2	+	+	0	0	0
<10 & OR <2	1	4	4	0	0
<20 & OR <5	2	18	15	+	0
VSBY ≥5	5	53	42	+	0
≥50 & ≥5	2	23	16	0	0
NC & ≥10	2	21	15	0	0

1197

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	6	2	0	0
<20 & OR <5	1	13	4	0	0
VSBY ≥5	16	71	13	0	0
≥50 & ≥5	13	49	8	0	0
NC & ≥10	13	46	7	0	0

186

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	5	0	0
<20 & OR <5	4	23	18	2	0
VSBY ≥5	9	45	42	3	0
≥50 & ≥5	4	10	10	1	0
NC & ≥10	2	8	9	1	0

196

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	.0	0	0
<10 & OR <2	0	2	2	0	0
<20 & OR <5	2	6	4	0	0
VSBY ≥5	16	61	18	4	0
≥50 & ≥5	14	49	16	4	0
NC & ≥10	14	49	16	2	0

51

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	8	+	0
<20 & OR <5	+	7	14	1	0
VSBY ≥5	5	48	43	3	0
≥50 & ≥5	4	38	24	2	0
NC & ≥10	4	37	24	2	0

203

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	6	1	0
<20 & OR <5	1	9	26	3	+
VSBY ≥5	2	29	63	6	+
≥50 & ≥5	1	11	21	2	0
NC & ≥10	1	10	19	2	0

1202

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	1	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	1	3	2	+
<20 & OR <5	+	4	15	6	+
VSBY ≥5	3	20	52	23	1
≥50 & ≥5	2	14	30	14	1
NC & ≥10	2	13	28	12	1

1982

26

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	6	6	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	11	11	0	0
<20 & OR <5	0	11	11	0	0
VSBY ≥5	11	33	33	17	0
≥50 & ≥5	0	22	17	17	0
NC & ≥10	0	17	17	17	0

18

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	+	0	0
VSBY <2	+	0	+	0	0
<10 & OR <2	+	1	2	+	0
<20 & OR <5	1	3	7	2	0
VSBY ≥5	8	44	40	7	0
≥50 & ≥5	7	38	29	5	0
NC & ≥10	7	35	27	4	0

244

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	3	1	1
<20 & OR <5	1	3	8	5	1
VSBY ≥5	7	34	41	15	3
≥50 & ≥5	6	27	26	7	2
NC & ≥10	6	25	25	6	1

440

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	+	1	2	+	+
VSBY <2	0	0	+	0	+
<10 & OR <2	+	4	6	1	1
<20 & OR <5	1	9	14	4	1
VSBY ≥5	7	33	45	11	2
≥50 & ≥5	6	21	30	7	1
NC & ≥10	5	19	28	6	1

280

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	1	0
<6 & OR <2	0	3	7	1	1
VSBY <2	0	1	1	0	0
<10 & OR <2	0	11	12	5	1
<20 & OR <5	0	15	23	6	1
VSBY ≥5	1	33	45	14	2
≥50 & ≥5	1	14	21	4	0
NC & ≥10	1	12	18	1	0

111

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	1	0
VSBY <2	0	0	1	1	0
<10 & OR <2	0	0	5	1	0
<20 & OR <5	0	4	12	4	0
VSBY ≥5	7	29	43	13	3
≥50 & ≥5	5	26	25	9	0
NC & ≥10	5	25	24	9	0

76

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	8	0	0
<6 & OR <2	0	2	10	0	0
VSBY <2	0	0	8	0	0
<10 & OR <2	0	2	10	0	0
<20 & OR <5	0	6	12	4	0
VSBY ≥5	4	38	42	6	0
≥50 & ≥5	4	29	27	0	0
NC & ≥10	4	27	23	0	0

52

36

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	2	0
<6 & OR <2	0	0	5	2	0
VSBY <2	0	0	5	2	0
<10 & OR <2	0	0	6	3	1
<20 & OR <5	0	0	13	13	4
VSBY ≥5	1	6	45	30	4
≥50 & ≥5	1	4	25	14	2
NC & ≥10	1	4	21	10	0

128

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	3	0
VSBY <2	0	0	0	3	0
<10 & OR <2	0	0	0	10	0
<20 & OR <5	0	7	7	28	3
VSBY ≥5	0	24	24	28	7
≥50 & ≥5	0	10	14	7	3
NC & ≥10	0	10	7	3	3

29

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	3	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	6	6	0
<20 & OR <5	0	3	22	19	3
VSBY ≥5	0	9	41	44	0
≥50 & ≥5	0	6	16	16	0
NC & ≥10	0	3	6	9	0

32

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	2	3	0	0
VSBY <2	0	2	2	0	0
<10 & OR <2	0	3	5	3	0
<20 & OR <5	0	4	19	6	0
VSBY ≥5	1	17	57	18	0
≥50 & ≥5	1	11	28	8	0
NC & ≥10	0	10	27	7	0

109

43

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	4	5	1	1
<6 & OR <2	1	6	6	2	1
VSBY <2	1	6	5	2	1
<10 & OR <2	1	10	9	2	1
<20 & OR <5	3	29	26	9	1
VSBY ≥5	6	36	24	8	1
≥50 & ≥5	2	10	4	1	1
NC & ≥10	2	9	3	0	0

173

44

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	9	11	0
<6 & OR <2	0	4	13	11	0
VSBY <2	0	4	9	11	0
<10 & OR <2	2	4	26	11	0
<20 & OR <5	2	6	38	34	2
VSBY ≥5	0	0	28	25	4
≥50 & ≥5	0	0	2	2	0
NC & ≥10	0	0	0	2	0

53

45

WIND SPEED (KNOTS)

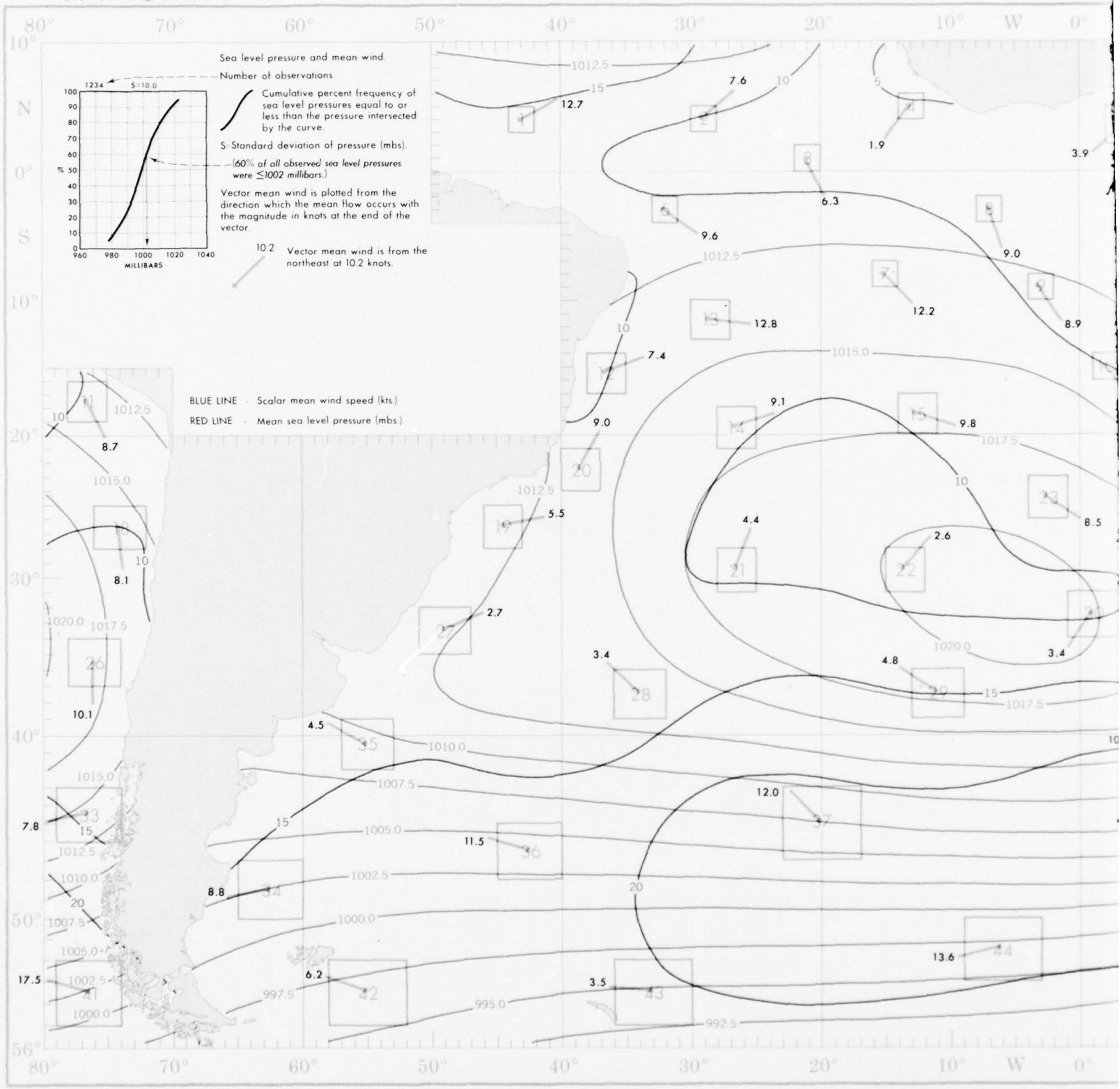
LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	3	3
<6 & OR <2	0	0	5	13	13
VSBY <2	0	0	3	13	8
<10 & OR <2	0	3	8	38	13
<20 & OR <5	0	8	23	44	13
VSBY ≥5	3	13	21	18	0
≥50 & ≥5	3	5	3	0	0
NC & ≥10	3	5	0	0	0

39

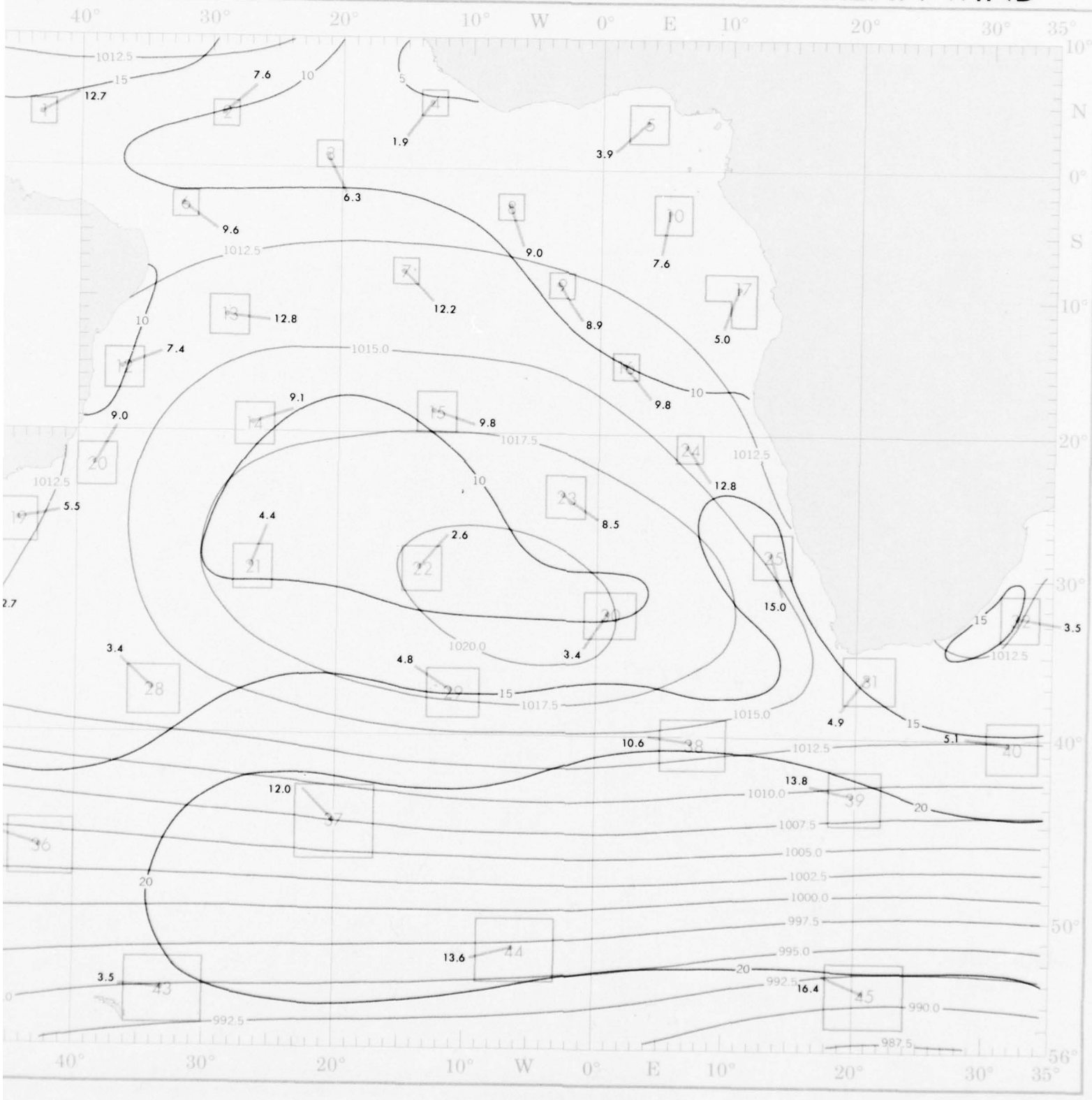
the objective compilation of available data for specified areas without regard to suspected biases.
rses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JANUARY

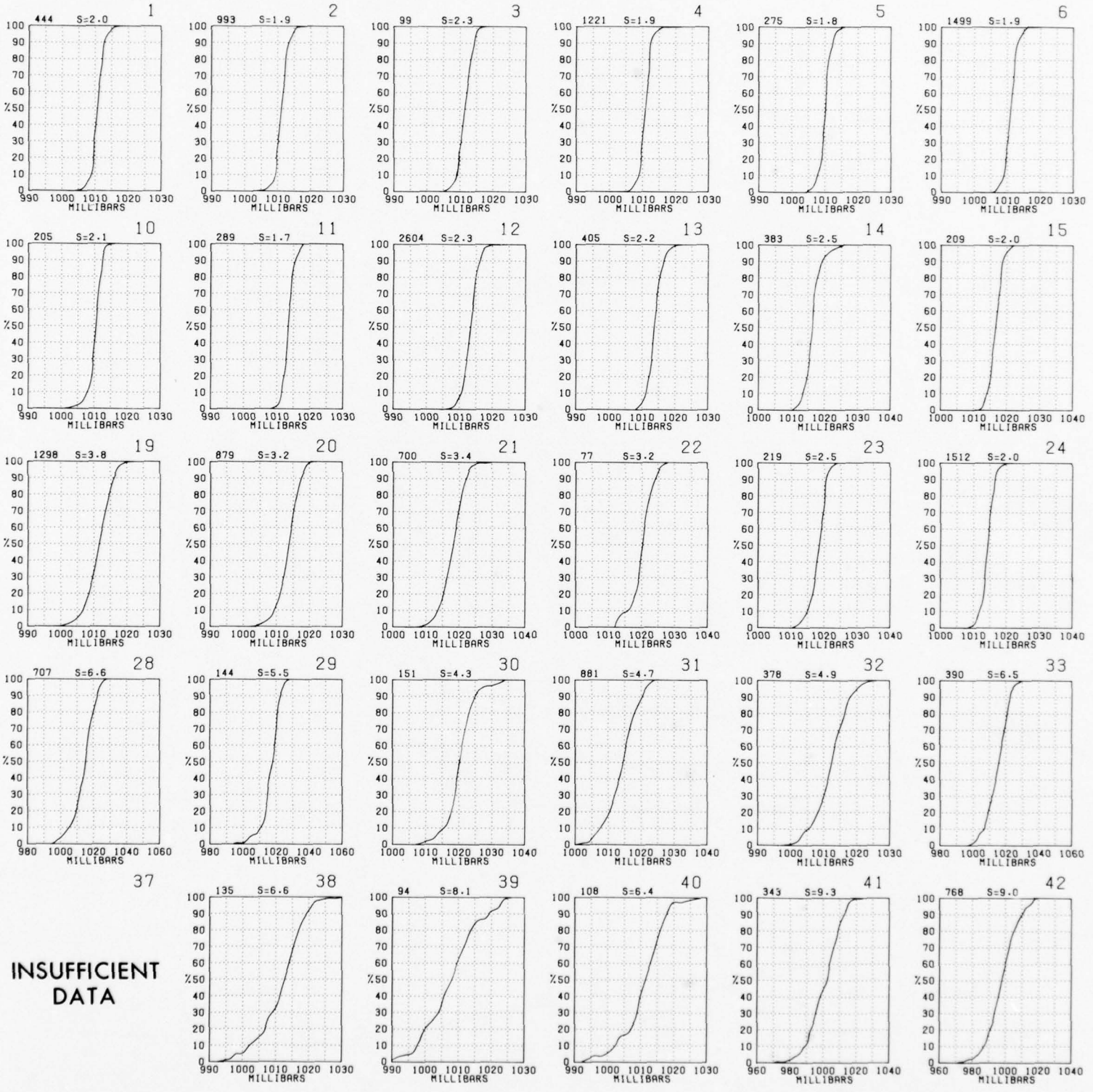
SEA LEVEL PRESS



SEA LEVEL PRESSURE AND MEAN WIND



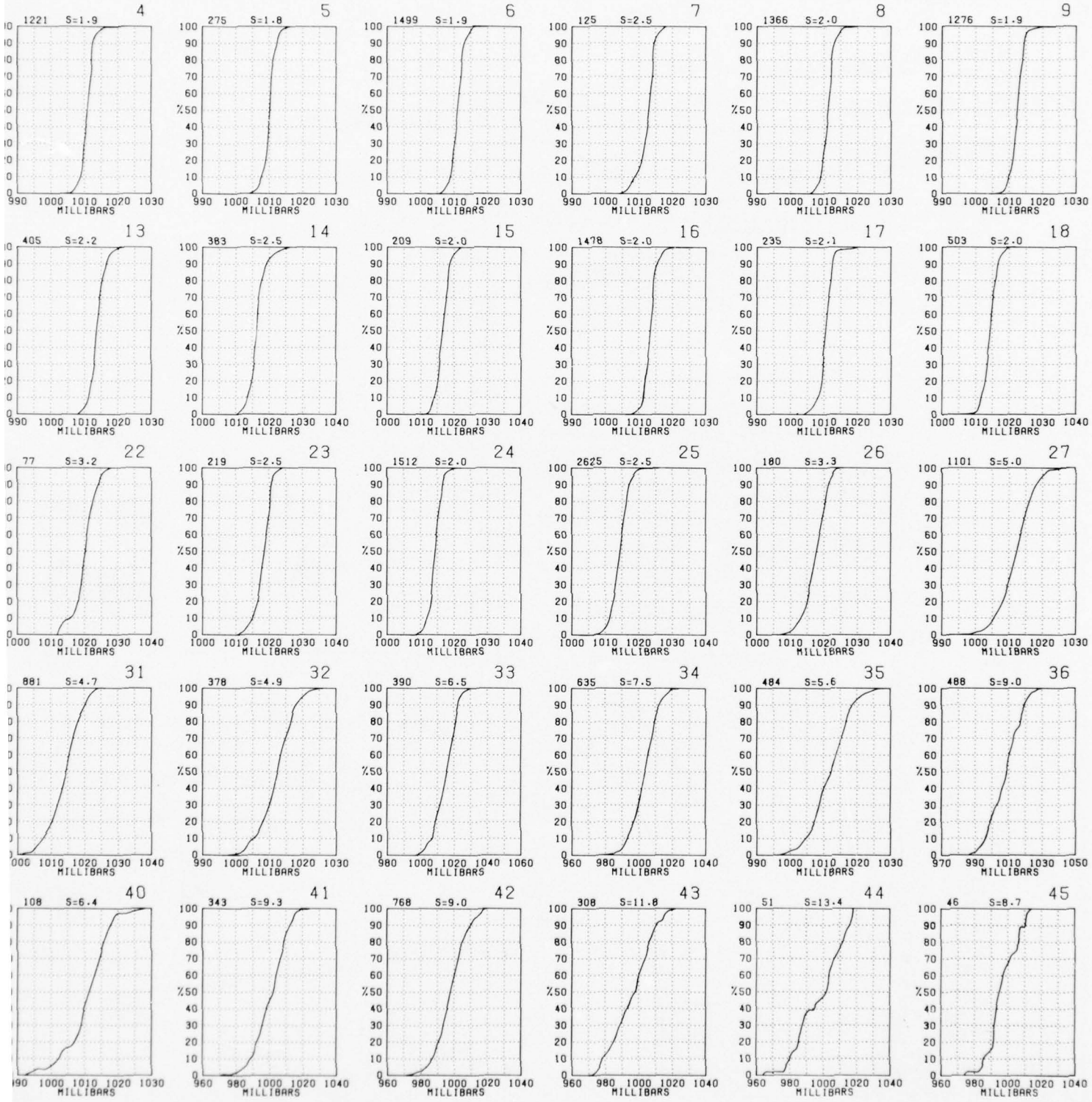
SEA LEVEL PRESSURE



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

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(opposite page) are based on all available data subjectively adjusted where bias was evident.

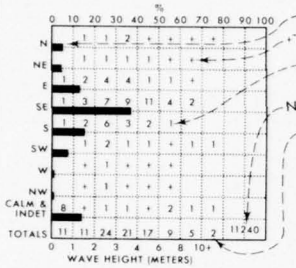
JANUARY

WAVES (<1.

Wave direction and height.

Direction frequency (top scale): Bars represent percent frequency of waves from each direction.

Height frequency (bottom scale): Printed figures represent percent frequency of wave heights observed from each direction.



(5% of all waves were from the N.)

+ indicates <.5% but >0.

(1% of all waves were from the S with heights from 6-7.5 meters.)

Number of observations.

(2% of the waves from all directions had heights ≥10 meters.)

WAVE HEIGHT INTERVAL

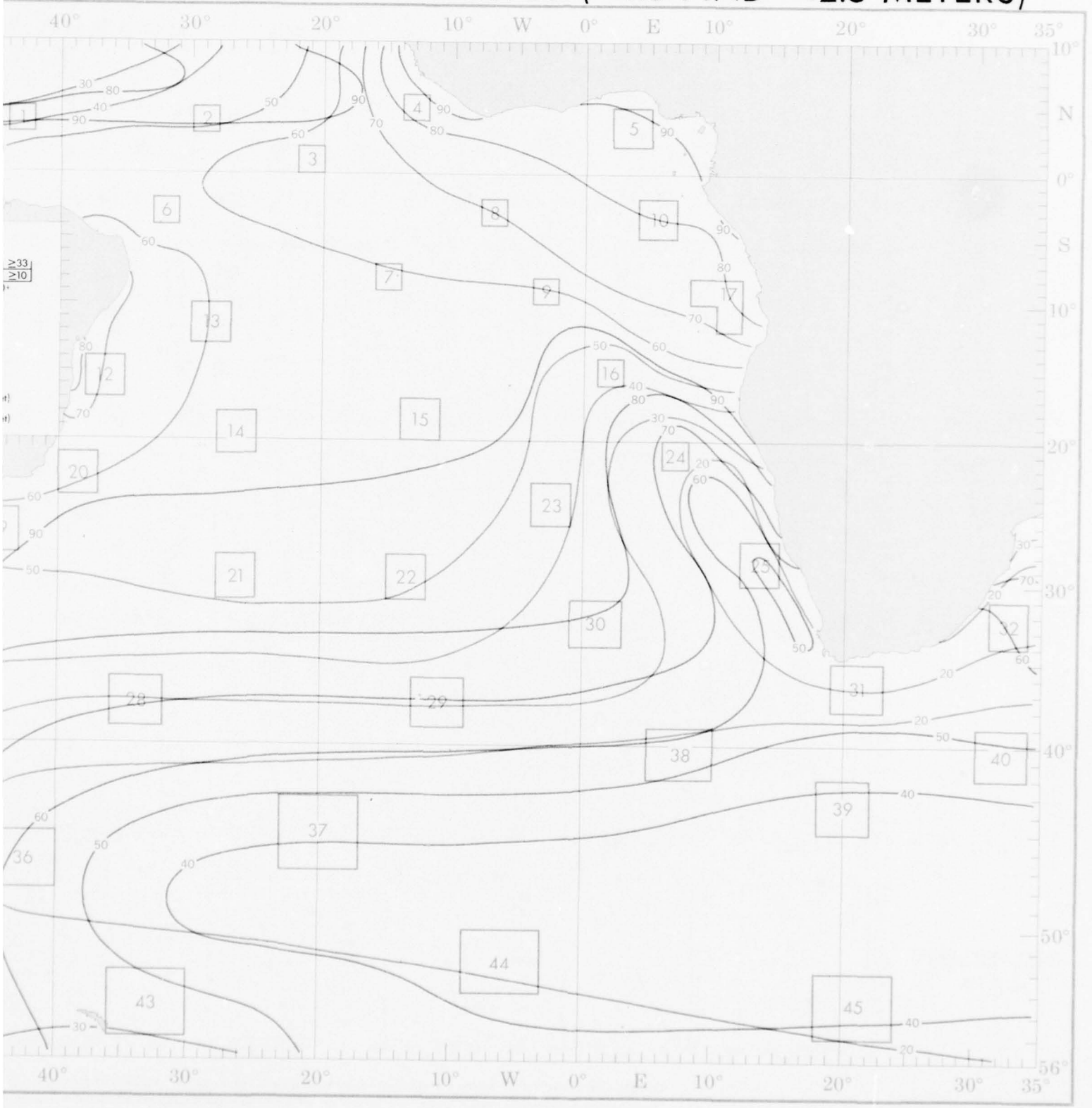
Feet	0-2	3-6	7-9	10-12	13-19	20-25	26-32	≥33
Meters	0-.5	1-1.5	2-2.5	3-3.5	4-5.5	6-7.5	8-9.5	≥10
	0	1	2	3	4	6	8	10+

Printed scale on bottom of chart

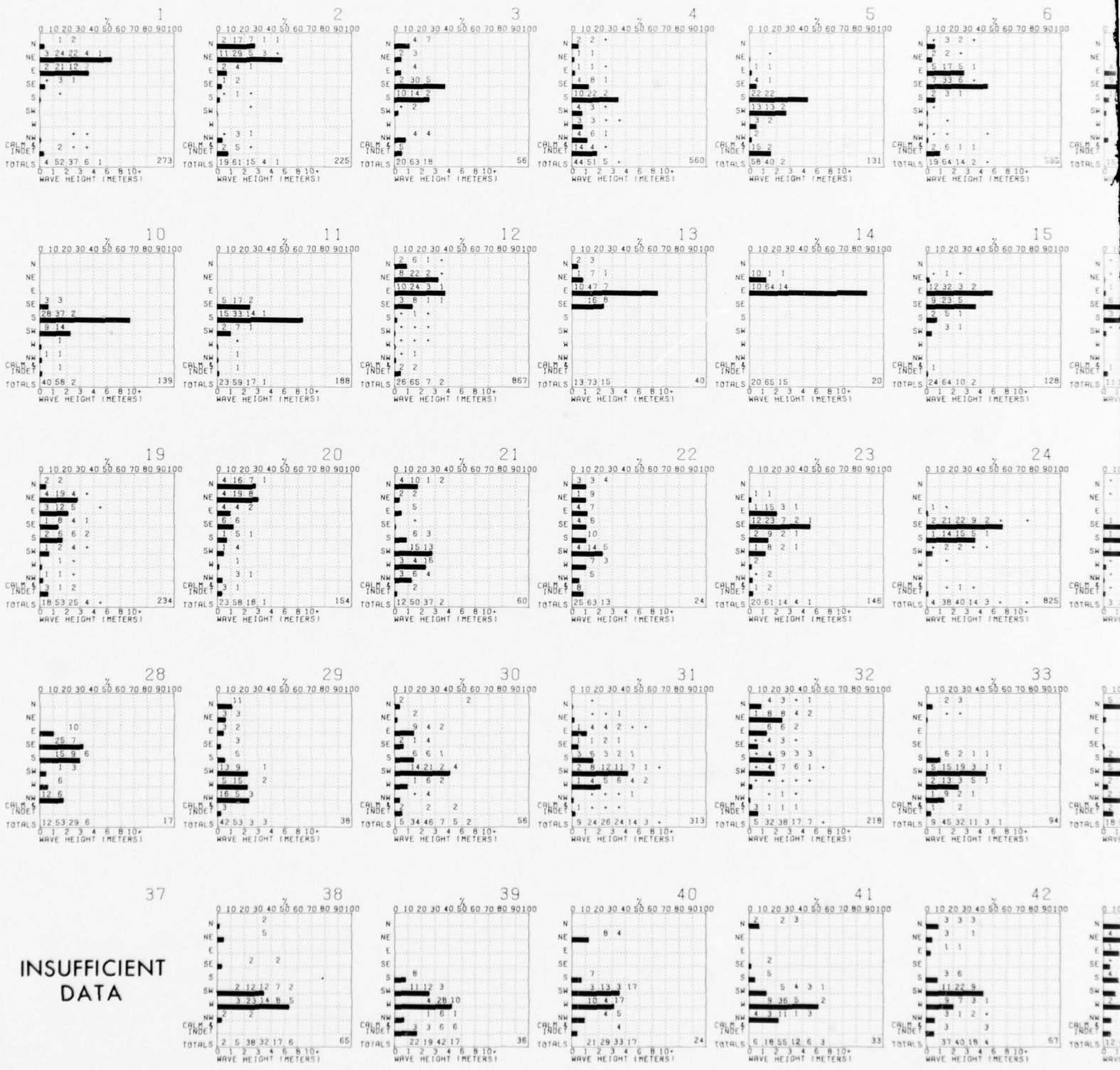
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)

RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

WAVES (<1.5 AND <2.5 METERS)



WAVE DIRECTION AND HEIGHT

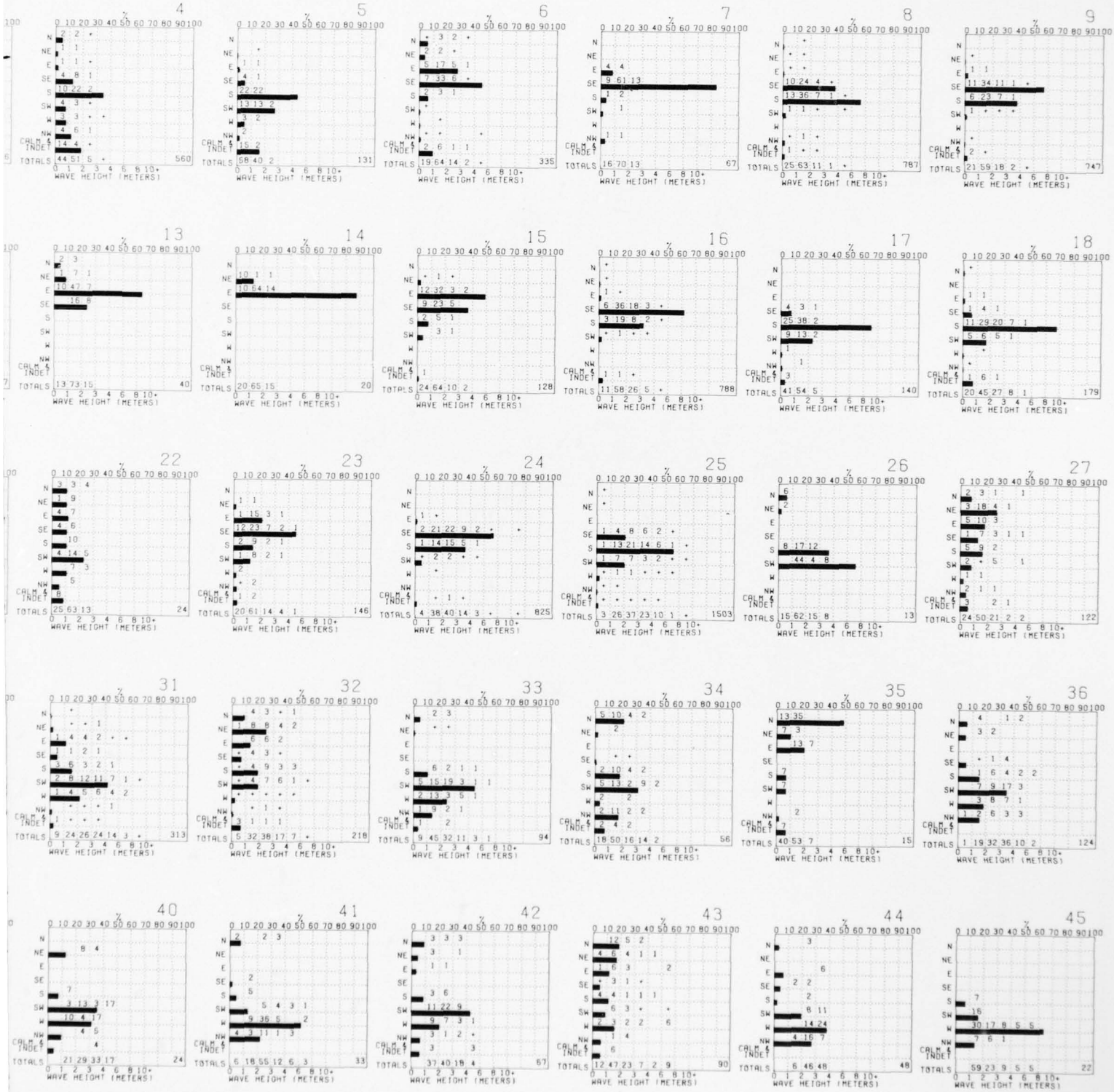


INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

HEIGHT

JANUARY



the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

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WAVES (≥

PERIOD (Seconds)

HEIGHT (METERS)	≤6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	≥22
0 - 1	21	3	1	+	+	+	+	+	+	+	+	+	+	+	+	+	6
1 - 1.5	22	16	6	2	1	+	+	+	+	+	+	+	+	+	+	+	+
1.5 - 2	3	6	4	3	1	+	+	+	+	+	+	+	+	+	+	+	+
2 - 2.5	+	1	1	1	1	+	+	+	+	+	+	+	+	+	+	+	+
2.5 - 3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0
3 - 3.5	0	+	+	0	0	+	0	+	+	+	+	+	+	+	+	+	0
3.5 - 4	0	0	0	+	0	0	0	+	+	+	+	+	+	+	+	+	0
≥4	0	0	0	0	0	+	0	+	+	+	+	+	+	+	+	+	0

4010

Percent frequency of occurrence of wave period and height.

(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)

+ indicates < 5% but > 0.

Number of observations.

Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.

BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)

RED LINE - Percent frequency of wave height ≥6 meters (20 feet)

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	0	0	0	0	0
1-1.5	20	23	4	1	1	+	3
2-2.5	7	12	12	2	+	2	1
3-3.5	+	1	4	1	0	0	+
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

274

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	+	+	0	0	6
1-1.5	18	14	7	4	2	0	15
2-2.5	2	6	3	2	+	+	1
3-3.5	0	1	2	0	0	+	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

228

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	0	0	0	0	0	5
1-1.5	32	20	3	2	0	0	2
2-2.5	2	3	8	2	2	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

59

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	3	1	+	0	0	16
1-1.5	16	13	4	2	4	1	7
2-2.5	1	1	1	+	1	+	+
3-3.5	0	0	0	0	0	+	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

612

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	10	2	0	0	0	29
1-1.5	17	9	7	0	0	0	6
2-2.5	0	0	1	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	3	0	0	0	0	5
1-1.5	22	17	6	2	3	0	14
2-2.5	4	6	1	1	+	+	1
3-3.5	0	1	+	0	0	0	1
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

340

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	29	5	0	3	0	0	5
1-1.5	17	16	6	1	3	1	11
2-2.5	0	0	0	2	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	5	3	0	0	0	3
1-1.5	20	22	7	4	1	0	4
2-2.5	2	4	7	2	2	0	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

193

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	21	1	+	+	0	0	6
1-1.5	32	19	3	1	+	+	8
2-2.5	1	3	2	+	0	0	+
3-3.5	0	+	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

904

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	2	0	0	0
1-1.5	46	15	2	5	2	0	0
2-2.5	2	10	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

41

14

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	5	0	0	0	0	10
1-1.5	5	25	20	0	0	0	15
2-2.5	5	5	5	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

20

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	5	0	1	0	0	4
1-1.5	32	17	5	3	2	2	2
2-2.5	1	3	4	2	0	1	0
3-3.5	0	2	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

133

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	+	1	0	0	0	8
1-1.5	19	19	6	1	+	0	6
2-2.5	4	11	5	2	0	0	3
3-3.5	0	+	2	1	0	0	+
4-5.5	0	0	0	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

243

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	1	0	1	0	0	7
1-1.5	25	20	4	1	1	0	5
2-2.5	4	8	3	1	0	0	2
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

157

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	3	0	0	0	0	5
1-1.5	24	10	2	0	10	2	2
2-2.5	8	6	0	8	5	8	0
3-3.5	0	0	0	2	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

62

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	4	0	0	0	0	8
1-1.5	19	8	15	4	8	4	0
2-2.5	0	4	4	4	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

26

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	4	1	0	0	0	1
1-1.5	25	20	6	4	3	1	2
2-2.5	5	6	3	0	0	0	0
3-3.5	0	1	1	1	1	0	0
4-5.5	0	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

148

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	0	+	0	0	1
1-1.5	12	13	4	1	2	+	5
2-2.5	5	14	11	4	1	1	4
3-3.5	2	4	4	2	1	1	1
4-5.5	+	+	1	1	+	+	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	+	0	0	0

827

28

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	0
1-1.5	6	24	18	0	0	0	6
2-2.5	0	6	18	6	0	0	0
3-3.5	0	6	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	37	3	0	0	0	0	3
1-1.5	29	16	8	0	0	0	0
2-2.5	0	3	0	0	0	0	0
3-3.5	0	0	0	0	0	3	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

38

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	7
1-1.5	8	8	8	0	0	7	0
2-2.5	2	13	15	8	2	2	2
3-3.5	0	0	2	3	0	2	0
4-5.5	0	0	2	2	0	0	2
6-7.5	0	0	2	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

60

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	3	0	0	0	0	3
1-1.5	7	6	5	+	1	+	3
2-2.5	3	10	7	3	1	+	1
3-3.5	1	6	6	6	2	1	1
4-5.5	2	3	4	2	2	+	1
6-7.5	0	1	1	1	+	0	+
8-9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	0	0

315

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	+	0	0	0	2
1-1.5	14	10	1	+	+	0	5
2-2.5	9	9	10	4	1	+	3
3-3.5	2	4	6	1	+	1	2
4-5.5	+	3	1	1	0	+	1
6-7.5	0	0	0	0	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

222

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	1	0	0	0	0	7
1-1.5	14	11	3	0	0	1	15
2-2.5	1	6	15	4	1	0	4
3-3.5	0	2	1	2	0	2	3
4-5.5	2	0	0	0	1	0	0
6-7.5	0	0	0	0	0	1	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

96

37

INSUFFICIENT DATA

38

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	2	0	0	0	0	0
1-1.5	0	3	0	0	2	0	0
2-2.5	0	18	9	2	9	0	0
3-3.5	0	2	5	5	22	0	0
4-5.5	0	0	0	0	17	0	0
6-7.5	0	0	0	0	2	5	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

65

39

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	6	8	3	3	0	3
2-2.5	0	0	8	3	3	0	6
3-3.5	0	3	3	31	0	0	6
4-5.5	0	3	0	3	6	0	6
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

36

40

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	0	17	0	0	0	4
2-2.5	0	8	4	4	4	0	8
3-3.5	0	4	8	13	0	0	8
4-5.5	0	8	4	0	4	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

24

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	0
1-1.5	12	3	3	0	0	0	0
2-2.5	12	15	24	0	0	0	3
3-3.5	6	0	0	3	3	0	0
4-5.5	6	0	0	0	0	0	0
6-7.5	0	3	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

33

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	15	9	9	1	0	0	3
2-2.5	3	9	22	6	0	0	0
3-3.5	3	3	9	1	0	0	1
4-5.5	0	1	0	0	0	0	3
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

67

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

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4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	3	1	+	0	0	16
1-1.5	16	13	4	2	4	1	7
2-2.5	1	1	1	+	1	+	+
3-3.5	0	0	0	0	0	+	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

612

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	10	2	0	0	0	29
1-1.5	17	9	7	0	0	0	6
2-2.5	0	0	1	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

139

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	3	0	0	0	0	5
1-1.5	22	17	6	2	3	0	14
2-2.5	4	6	1	1	+	+	1
3-3.5	0	1	+	0	0	0	1
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

340

7

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	1	0	0	0	3
1-1.5	43	15	6	3	1	0	0
2-2.5	4	4	1	0	3	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

67

8

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	2	1	0	0	0	7
1-1.5	22	18	8	2	3	1	6
2-2.5	2	5	1	1	1	1	+
3-3.5	0	+	0	1	0	0	0
4-5.5	0	0	0	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

807

9

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	1	+	0	0	7
1-1.5	19	17	9	3	2	1	7
2-2.5	4	6	5	1	1	1	1
3-3.5	+	1	+	+	0	+	0
4-5.5	0	0	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

760

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	2	0	0	0
1-1.5	46	15	2	5	2	0	0
2-2.5	2	10	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

41

14

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	5	0	0	0	0	10
1-1.5	5	25	20	0	0	0	15
2-2.5	5	5	5	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

20

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	5	0	1	0	0	4
1-1.5	32	17	5	3	2	2	2
2-2.5	1	3	4	2	0	1	0
3-3.5	0	2	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

133

16

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	+	1	0	0	3
1-1.5	19	18	8	2	2	1	7
2-2.5	4	9	7	1	1	1	2
3-3.5	1	2	1	1	+	+	0
4-5.5	0	+	+	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

791

17

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	33	2	1	1	0	0	8
1-1.5	21	18	3	5	3	0	1
2-2.5	1	1	1	1	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

150

18

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	3	1	0	0	0	5
1-1.5	16	11	5	4	0	1	6
2-2.5	2	6	14	3	1	0	1
3-3.5	1	2	2	1	1	1	0
4-5.5	0	0	0	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

185

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	4	0	0	0	0	8
1-1.5	19	8	15	4	8	4	0
2-2.5	0	4	4	4	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

26

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	4	1	0	0	0	1
1-1.5	25	20	6	4	3	1	2
2-2.5	5	6	3	0	0	0	0
3-3.5	0	1	1	1	1	0	0
4-5.5	0	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

148

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	0	+	0	0	1
1-1.5	12	13	4	1	2	+	5
2-2.5	5	14	11	4	1	1	4
3-3.5	2	4	4	2	1	1	1
4-5.5	+	+	1	1	+	+	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	+	0	0	0

827

25

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	+	+	0	0	1
1-1.5	7	7	4	1	2	+	4
2-2.5	6	12	8	4	2	1	3
3-3.5	2	6	7	4	1	+	2
4-5.5	1	2	3	2	1	1	+
6-7.5	0	+	1	+	0	+	+
8-9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	0	0

1508

26

INSUFFICIENT DATA

27

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	1	2	0	0	10
1-1.5	20	13	6	3	0	0	7
2-2.5	4	6	9	0	0	0	2
3-3.5	0	2	0	0	0	0	1
4-5.5	0	0	2	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

123

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	3	0	0	0	0	3
1-1.5	7	6	5	+	1	+	3
2-2.5	3	10	7	3	1	+	1
3-3.5	1	6	6	6	2	1	1
4-5.5	2	3	4	2	2	+	1
6-7.5	0	1	1	1	+	0	+
8-9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	0	0

315

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	+	0	0	0	2
1-1.5	14	10	1	+	+	0	5
2-2.5	9	9	10	4	1	+	3
3-3.5	2	4	6	1	+	1	2
4-5.5	+	3	1	1	0	+	1
6-7.5	0	0	0	0	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

222

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	1	0	0	0	0	7
1-1.5	14	11	3	0	0	1	15
2-2.5	1	6	15	4	1	0	4
3-3.5	0	2	1	2	0	2	3
4-5.5	2	0	0	0	1	0	0
6-7.5	0	0	0	0	0	1	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

96

34

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	0	0	0	5
1-1.5	25	11	7	0	0	2	5
2-2.5	9	2	4	0	0	0	2
3-3.5	7	4	0	2	2	0	0
4-5.5	0	0	2	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

56

35

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	29	0	0	6	0	0	12
1-1.5	18	6	0	0	0	0	24
2-2.5	0	0	0	6	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

36

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	0	0	0	0	0	0
1-1.5	3	5	11	0	0	0	0
2-2.5	0	5	24	2	0	0	1
3-3.5	1	1	19	12	2	0	2
4-5.5	1	3	2	2	2	0	0
6-7.5	0	1	0	0	0	1	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

124

40

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	0	17	0	0	0	4
2-2.5	0	8	4	4	4	0	8
3-3.5	0	4	8	13	0	0	8
4-5.5	0	8	4	0	4	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

24

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	0
1-1.5	12	3	3	0	0	0	0
2-2.5	12	15	24	0	0	0	3
3-3.5	6	0	0	3	3	0	0
4-5.5	6	0	0	0	0	0	0
6-7.5	0	3	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

33

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	15	9	9	1	0	0	3
2-2.5	3	9	22	6	0	0	0
3-3.5	3	3	9	1	0	0	1
4-5.5	0	1	0	0	0	0	3
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

67

43

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	2	2	0	0	0	4
1-1.5	27	4	1	0	0	0	14
2-2.5	18	1	2	0	0	1	1
3-3.5	2	3	0	0	0	0	1
4-5.5	0	1	0	1	0	0	0
6-7.5	0	6	3	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

90

44

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	2	2	2	0	0	0	0
2-2.5	10	0	0	17	15	0	4
3-3.5	13	0	0	6	19	6	4
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

48

45

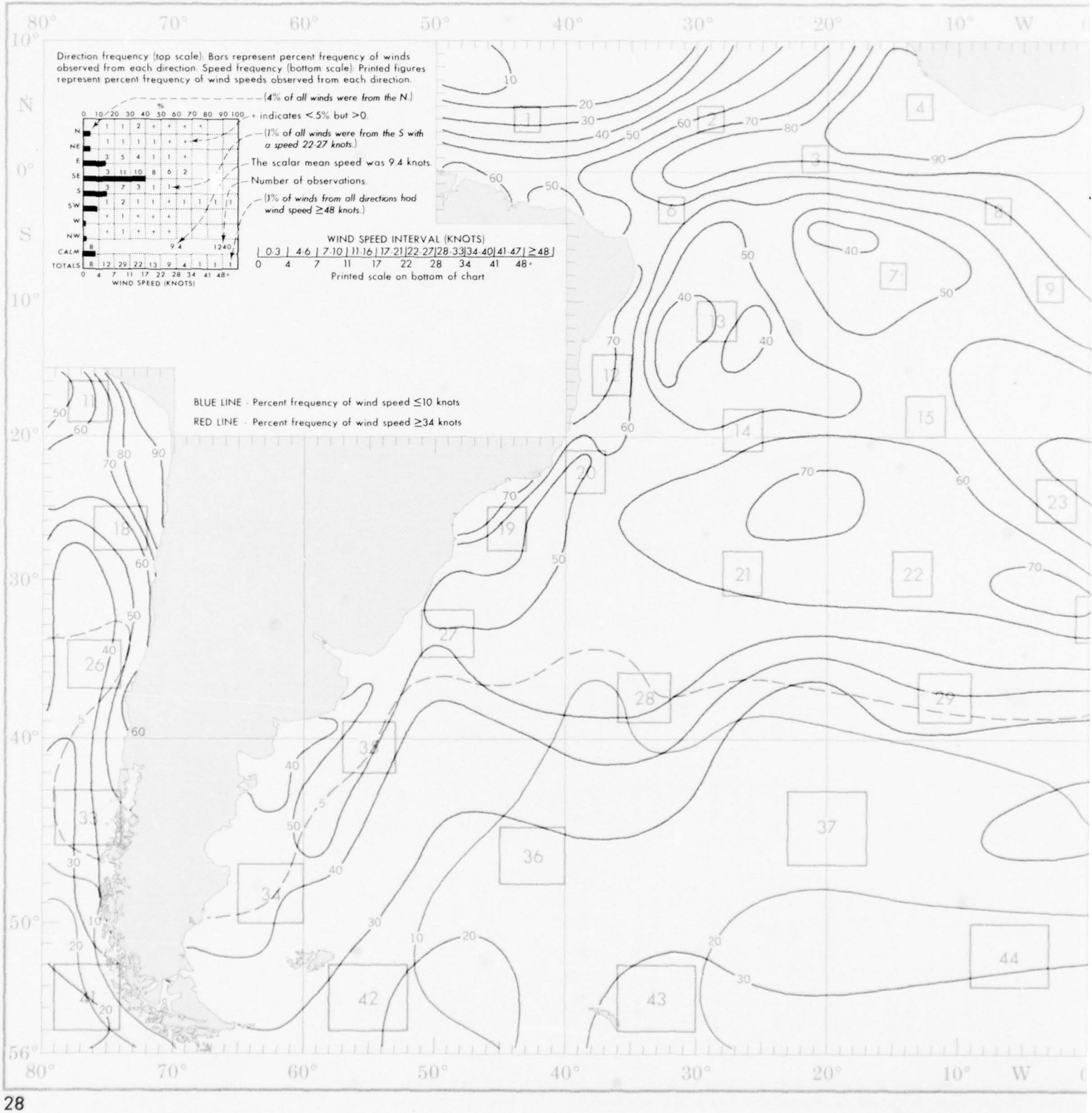
PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	27	23	9	0	0	0	0
2-2.5	0	9	9	0	0	0	5
3-3.5	0	5	5	0	0	0	0
4-5.5	5	0	0	0	0	0	0
6-7.5	0	0	0	0	0	5	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

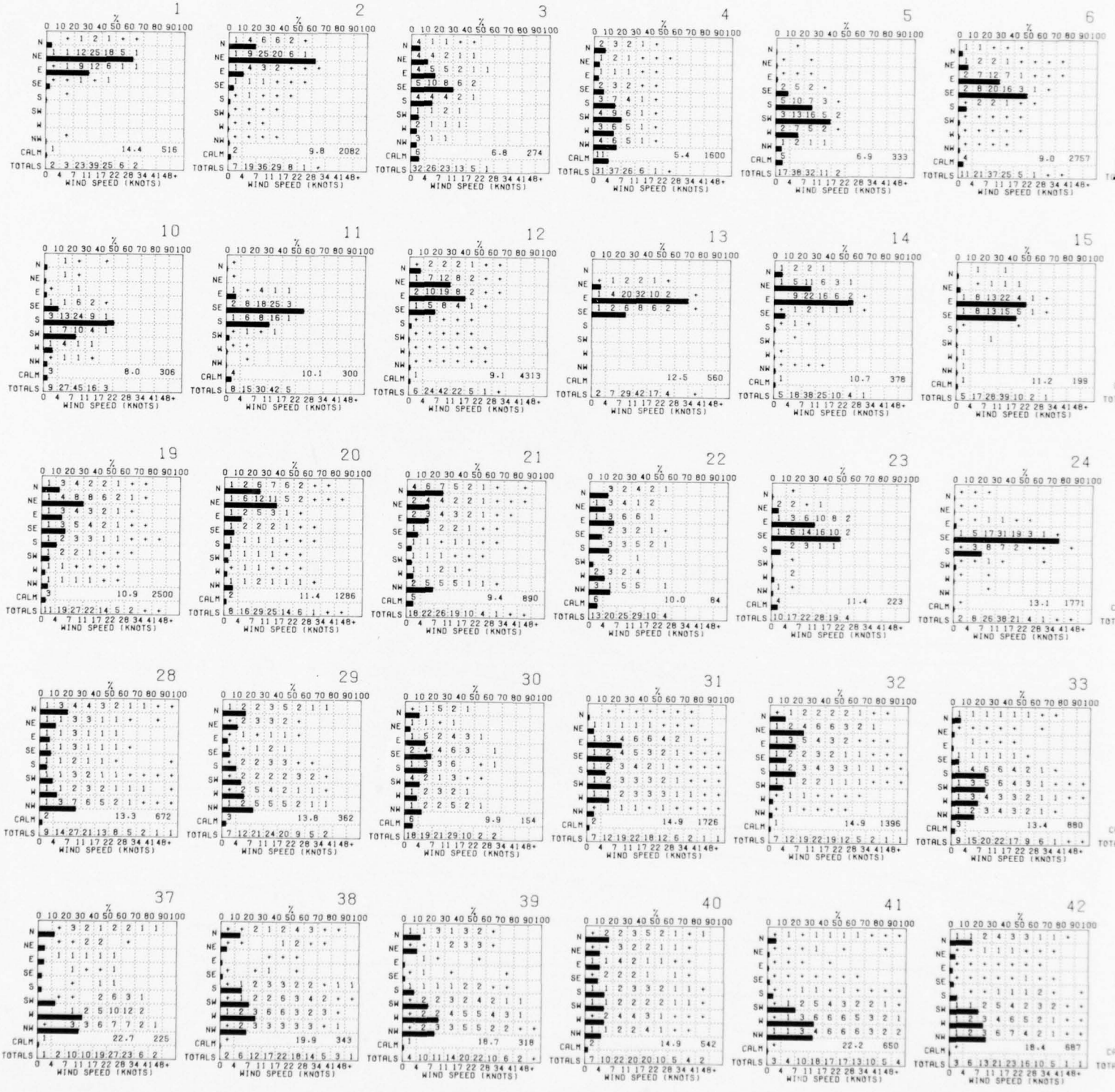
FEBRUARY


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but > 0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥ 48 knots.)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
WIND SPEED (KNOTS)
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

SURFACE WINDS

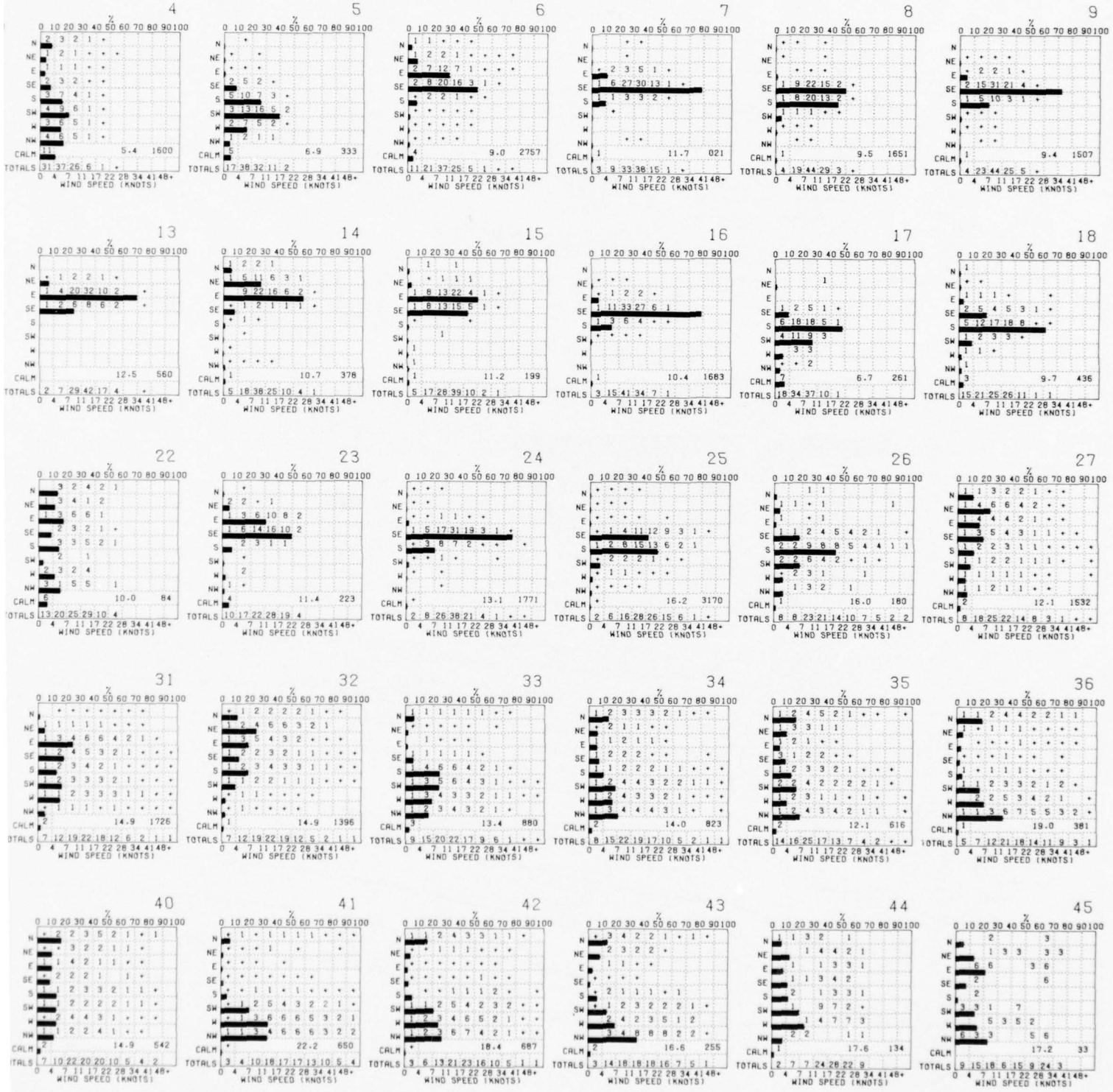


WIND DIRECTION AND SPEED



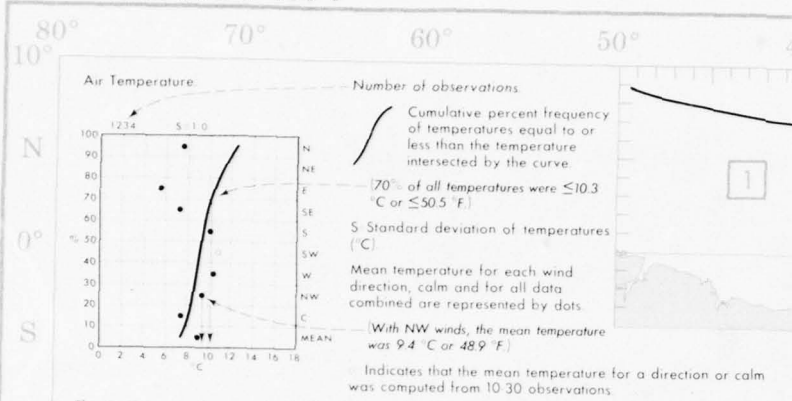
Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

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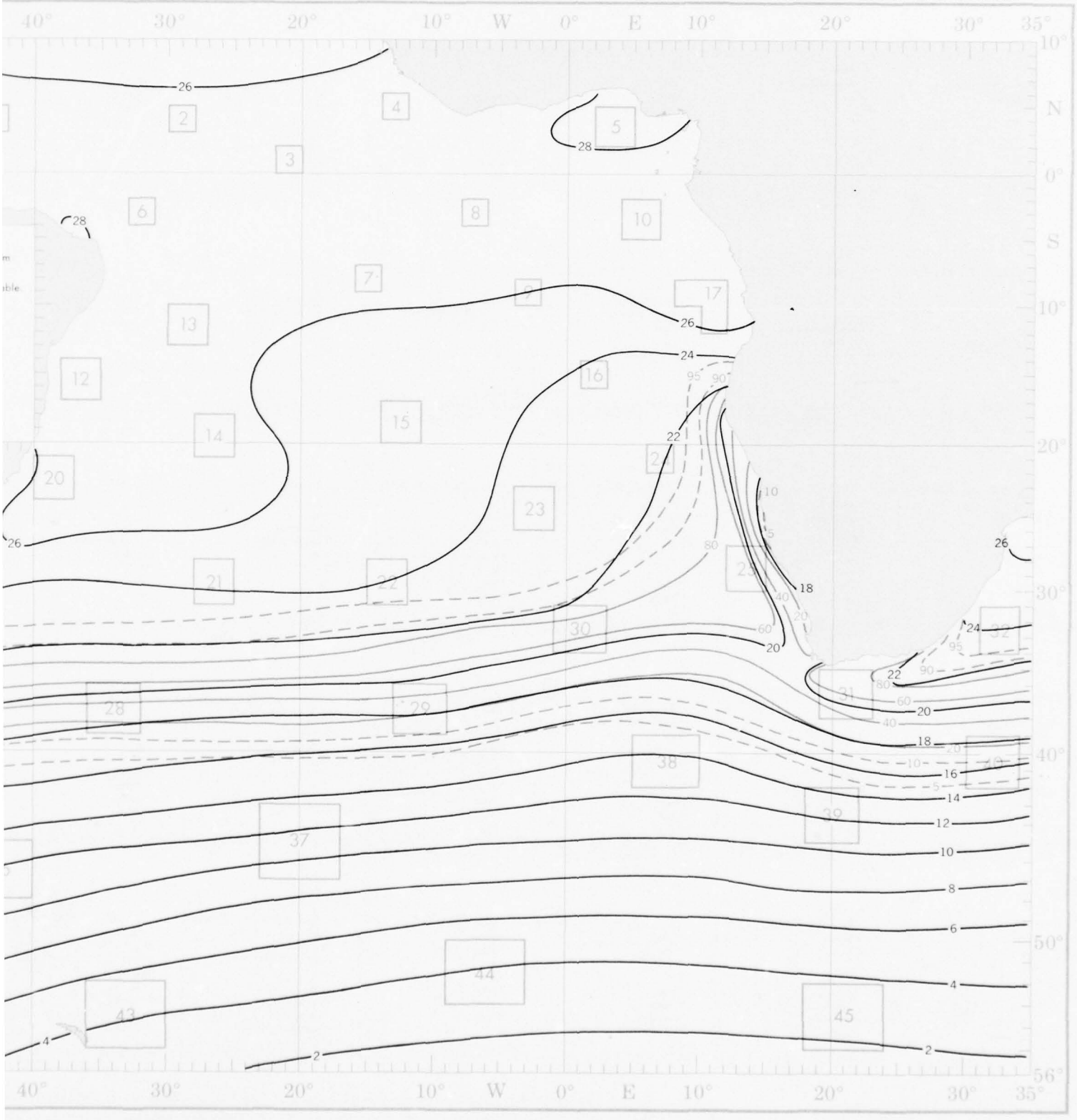
FEBRUARY



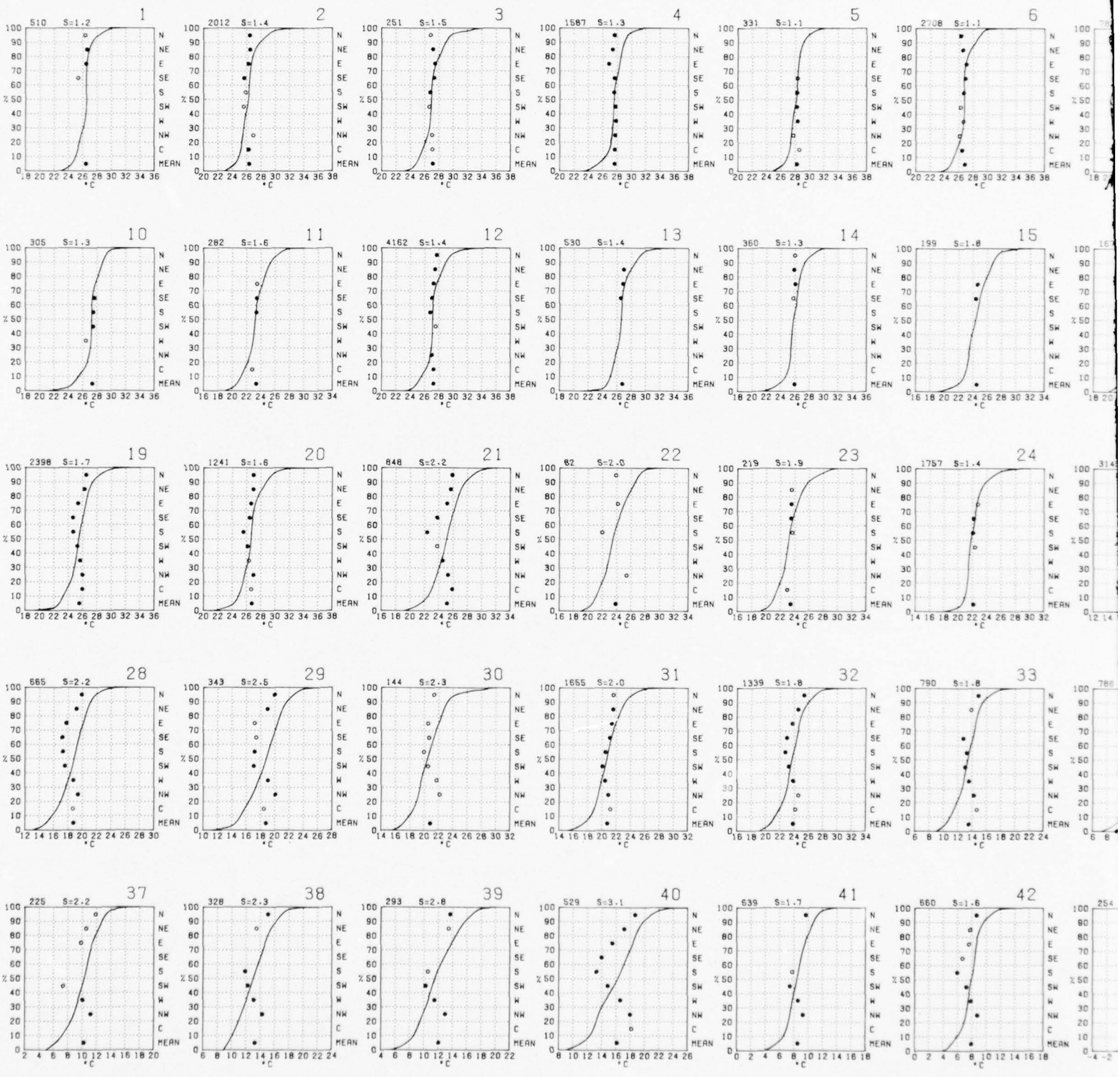
BLACK LINE — *Mean air temperature* (°C)

RED LINE — Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE

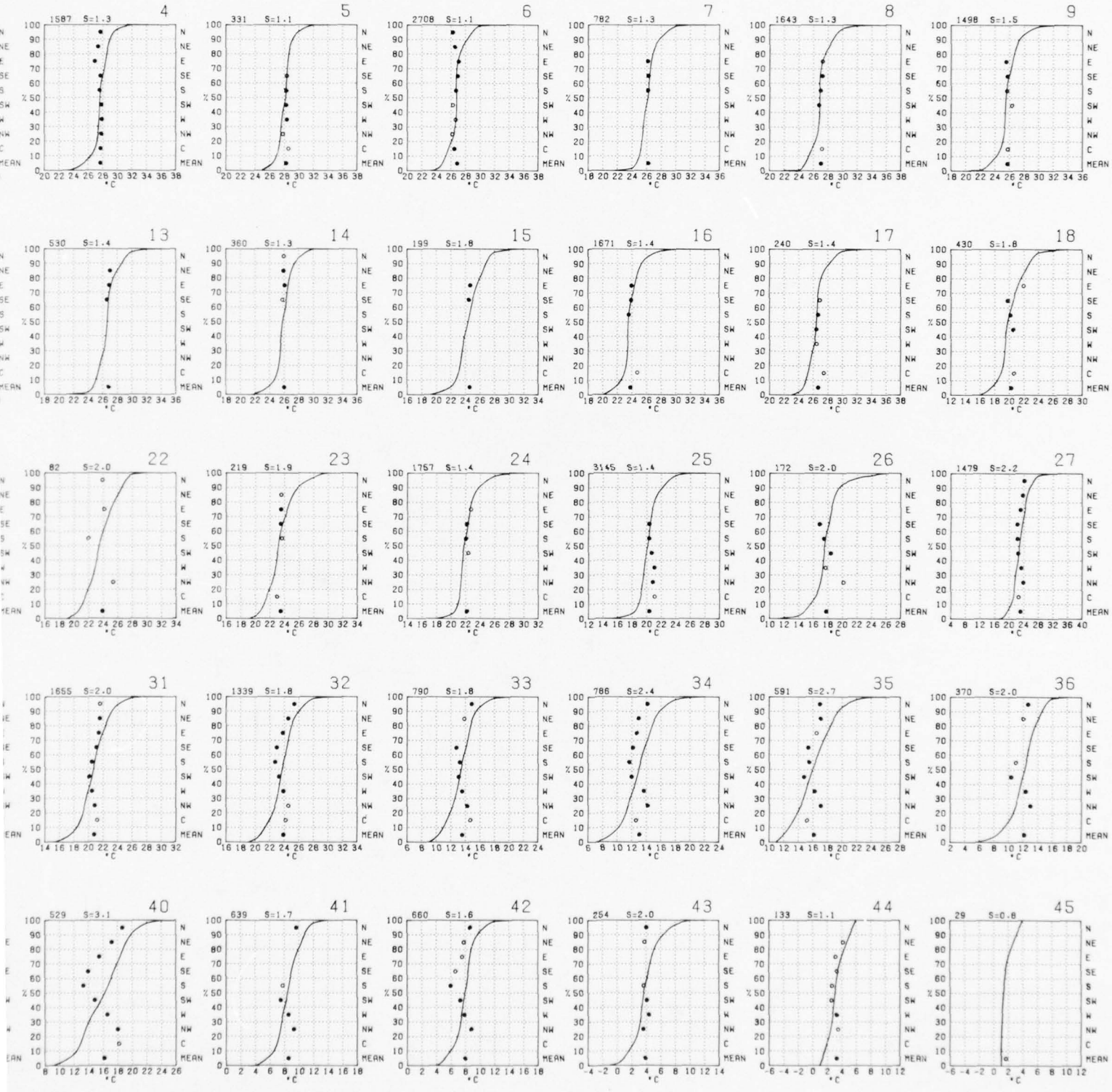


SURFACE AIR TEMPERATURE



Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

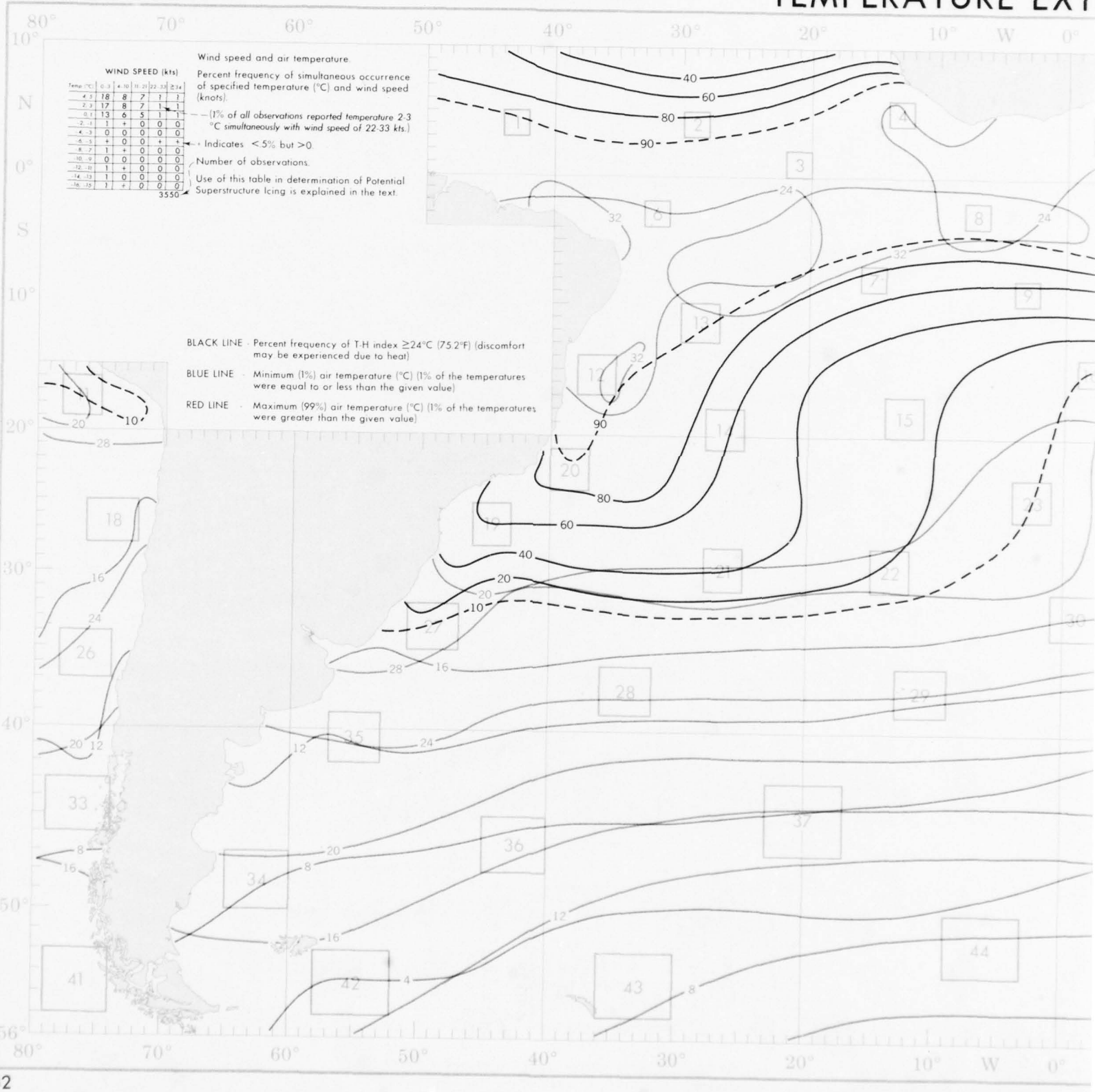
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yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

TEMPERATURE EXT



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	+	4	11	1	0
26.27	1	17	45	5	0
24.25	1	4	7	1	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

510

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	2	1	0	0
28.29	1	8	5	+	0
26.27	4	34	23	1	0
24.25	1	11	7	+	0
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2018

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	2	+	0	0
30.31	2	2	+	0	0
28.29	12	18	4	+	0
26.27	19	26	9	+	0
24.25	2	3	1	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

251

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	2	4	+	0	0
28.29	18	31	2	0	0
26.27	13	23	3	0	0
24.25	+	2	1	+	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1689

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	3	8	2	0	0
28.29	11	49	8	0	0
26.27	3	10	3	0	0
24.25	0	1	+	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

335

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	1	1	+	+	0
28.29	2	15	8	+	0
26.27	6	38	20	1	0
24.25	1	4	2	0	+
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2722

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	2	1	0	0
28.29	6	34	9	0	0
26.27	4	30	8	0	0
24.25	1	4	1	0	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

312

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	1	0	0
26.27	1	4	4	0	0
24.25	4	14	16	0	0
22.23	3	22	23	0	0
20.21	+	2	3	0	0
18.19	1	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

282

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	+	+	0	0
32.33	+	1	+	0	0
30.31	1	4	1	0	0
28.29	2	21	9	+	0
26.27	3	38	15	1	0
24.25	+	2	1	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4173

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	+	0	0
30.31	+	+	2	0	0
28.29	0	8	15	1	0
26.27	1	21	36	2	0
24.25	+	4	6	+	0
22.23	0	1	+	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

530

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	+	0
28.29	1	9	3	1	0
26.27	1	28	18	3	0
24.25	2	19	12	1	0
22.23	0	1	+	0	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

360

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	0	0	0
28.29	1	3	3	1	0
26.27	1	9	14	0	0
24.25	2	19	21	2	0
22.23	1	13	10	1	0
20.21	1	1	2	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

199

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	1	1	+	0
28.29	1	5	3	+	0
26.27	5	20	16	3	0
24.25	4	17	13	3	+
22.23	1	3	3	1	+
20.21	+	+	+	+	+
18.19	0	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2406

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	+	+	+	0	0
30.31	+	3	2	+	+
28.29	2	11	9	2	+
26.27	4	23	25	4	+
24.25	1	6	4	2	+
22.23	+	1	+	+	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1241

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	1	0	0	0
28.29	3	6	2	+	0
26.27	6	15	8	1	+
24.25	4	18	12	2	0
22.23	2	5	6	2	+
20.21	1	2	1	+	0
18.19	0	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

848

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	1	1	1	0	0
26.27	5	9	5	0	0
24.25	5	12	15	2	0
22.23	1	17	13	0	0
20.21	0	6	5	1	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

82

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	2	3	0	0
26.27	1	2	4	+	0
24.25	3	11	19	0	0
22.23	4	20	19	3	0
20.21	2	3	4	0	0
18.19	0	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

219

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	+	+	0	0
26.27	+	1	1	+	+
24.25	+	5	6	+	+
22.23	1	19	34	2	0
20.21	+	8	19	2	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1759

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	0	0	0
24.25	+	+	+	+	0
22.23	1	3	2	2	1
20.21	3	14	12	4	+
18.19	3	11	10	6	2
16.17	2	8	7	1	1
14.15	1	4	2	0	+
12.13	0	1	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

665

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	1	1	+	0	0
22.23	1	3	5	2	+
20.21	2	10	15	2	1
18.19	1	10	14	6	+
16.17	1	6	7	4	0
14.15	1	2	4	+	+
12.13	0	0	0	+	0
10.11	+	+	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

343

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	> 34
28.29	0	0	1	0	0
26.27	0	1	1	0	0
24.25	3	3	0	0	0
22.23	5	14	8	1	0
20.21	7	15	10	1	0
18.19	2	7	13	2	0
16.17	1	1	3	1	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

144

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	1	1	+	0
24.25	1	3	3	+	+
22.23	2	9	11	4	1
20.21	2	12	16	8	1
18.19	1	5	8	5	1
16.17	+	1	2	2	+
14.15	0	+	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1657

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	1	1	+	+
26.27	1	6	5	3	+
24.25	3	12	16	8	1
22.23	2	9	14	6	1
20.21	+	2	4	1	1
18.19	0	+	0	+	+
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1342

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	+	0
18.19	+	+	1	+	+
16.17	2	5	3	2	+
14.15	3	14	16	6	+
12.13	2	12	15	6	1
10.11	1	3	4	2	+
8.9	0	+	+	1	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

790

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	0	+	1	1	0
16.17	0	3	5	7	1
14.15	2	2	13	9	1
12.13	+	7	13	8	5
10.11	+	5	5	5	3
8.9	0	1	2	1	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

328

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	0	+	1	1	0
16.17	1	2	4	3	0
14.15	+	5	7	6	2
12.13	1	4	7	7	2
10.11	0	4	9	10	4
8.9	1	4	4	5	+
6.7	0	1	1	1	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.-1	0	0	0	0	0
-2.-1	0	0	0	0	0

293

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	1	1	+	0
16.17	1	2	4	3	0
14.15	+	5	7	6	2
12.13	1	4	7	7	2
10.11	0	4	9	10	4
8.9	1	4	4	5	+
6.7	0	1	1	1	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.-1	0	0	0	0	0
-2.-1	0	0	0	0	0

293

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	+	0
22.23	0	1	2	1	+
20.21	2	3	5	1	0
18.19	1	7	9	2	1
16.17	1	7	9	4	1
14.15	2	6	5	2	1
12.13	+	6	7	4	2
10.11	+	2	2	1	+
8.9	0	0	+	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

529

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	+	+	0
12.13	0	1	2	2	1
10.11	1	3	8	10	4
8.9	1	6	14	14	8
6.7	1	3	9	5	5
4.5	+	+	1	+	+
2.3	0	0	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

540

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	0	0	0
12.13	+	+	+	+	0
10.11	1	3	7	4	+
8.9	2	8	22	11	4
6.7	+	6	11	9	3
4.5	0	1	2	3	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

660

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

TEMPERATURE

FEBRUARY

3

≥ 34
0
0
0
0
0
0
0
0
0
0

251

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	2	4	+	0	0
28.29	18	31	2	0	0
26.27	13	23	3	0	0
24.25	+	2	1	+	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1689

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	3	8	2	0	0
28.29	11	49	8	0	0
26.27	3	10	3	0	0
24.25	0	1	+	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

335

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	1	1	+	+	0
28.29	2	15	8	+	0
26.27	6	38	20	1	0
24.25	1	4	2	0	+
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2722

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	1	1	0	0
28.29	0	7	8	0	0
26.27	1	22	32	1	0
24.25	2	11	13	1	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

783

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
36.37	0	+	0	0	0
34.35	0	0	+	0	0
32.33	+	1	+	0	0
30.31	+	3	1	0	0
28.29	1	18	8	0	0
26.27	3	38	22	+	0
24.25	+	3	1	0	0
22.23	0	0	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0

1650

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	0	+	0	0
30.31	+	1	+	0	0
28.29	+	6	3	0	0
26.27	1	27	14	+	0
24.25	2	31	12	+	0
22.23	0	1	1	+	0
20.21	0	0	0	0	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1507

12

≥ 34
0
0
0
0
0
0
0
0
0
0

4173

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	+	0	0
30.31	+	+	2	0	0
28.29	0	8	15	1	0
26.27	1	21	36	2	0
24.25	+	4	6	+	0
22.23	0	1	+	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

530

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	+	0
28.29	1	9	3	1	0
26.27	1	28	18	3	0
24.25	2	19	12	1	0
22.23	0	1	+	0	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

360

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	0	0	0
28.29	1	3	3	1	0
26.27	1	9	14	0	0
24.25	2	19	21	2	0
22.23	1	13	10	1	0
20.21	1	1	2	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

199

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	0	0	0	0
30.31	0	+	+	0	0
28.29	+	1	1	0	0
26.27	+	6	4	+	0
24.25	1	24	20	+	0
22.23	1	23	16	+	0
20.21	0	1	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1678

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	1	2	0	0	0
28.29	5	14	1	0	0
26.27	12	40	8	0	0
24.25	1	13	2	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

241

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	+	3	+	0	0
22.23	6	10	4	0	0
20.21	5	18	16	+	0
18.19	3	15	15	1	0
16.17	0	+	2	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

430

21

≥ 34
0
0
0
+
0
+
0
0
0
0

848

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	1	1	1	0	0
26.27	5	9	5	0	0
24.25	5	12	15	2	0
22.23	1	17	13	0	0
20.21	0	6	5	1	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

82

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	2	3	0	0
26.27	1	2	4	+	0
24.25	3	11	19	0	0
22.23	4	20	19	3	0
20.21	2	3	4	0	0
18.19	0	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

219

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	+	+	0	0
26.27	+	1	1	+	+
24.25	+	5	6	+	+
22.23	1	19	34	2	0
20.21	+	8	19	2	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1759

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	1	1	+	+
22.23	+	5	9	2	+
20.21	1	12	30	12	1
18.19	+	3	13	6	+
16.17	+	+	+	+	0
14.15	+	+	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

3151

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	1	0	0	0	0
24.25	0	1	0	0	0
22.23	0	2	0	0	0
20.21	1	8	4	0	0
18.19	3	11	15	6	2
16.17	2	7	17	8	6
14.15	1	2	1	3	0
12.13	0	0	0	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

172

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	0	+	0	0
30.31	+	1	+	+	0
28.29	+	1	+	0	0
26.27	1	6	3	1	0
24.25	2	12	11	3	+
22.23	3	15	15	4	+
20.21	1	7	6	2	+
18.19	1	1	1	1	+
16.17	+	0	+	+	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1482

30

≥ 34
0
0
0
0
0
0
0
0
0
0

144

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	1	1	+	0
24.25	1	3	3	+	+
22.23	2	9	11	4	1
20.21	2	12	16	8	1
18.19	1	5	8	5	1
16.17	+	1	2	2	+
14.15	0	+	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1657

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	1	1	+	+
26.27	1	6	5	3	+
24.25	3	12	16	8	1
22.23	2	9	14	6	1
20.21	+	2	4	1	1
18.19	0	+	0	+	+
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1342

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	+	0
18.19	+	+	1	+	+
16.17	2	5	3	2	+
14.15	3	14	16	6	+
12.13	2	12	15	6	1
10.11	1	3	4	2	+
8.9	0	+	+	1	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

790

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	0	0
20.21	0	+	0	0	0
18.19	1	2	1	+	0
16.17	+	4	4	2	+
14.15	2	10	10	5	1
12.13	3	12	11	5	1
10.11	2	6	8	2	1
8.9	+	2	1	1	+
6.7	+	+	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

787

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	1	0	+	0	0
22.23	+	1	1	+	0
20.21	1	4	3	1	+
18.19	2	7	8	3	+
16.17	3	12	9	4	1
14.15	5	10	6	2	1
12.13	3	5	3	2	1
10.11	0	1	1	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

593

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	1	0	0	0
16.17	+	1	2	1	+
14.15	1	3	9	4	1
12.13	2	10	18	13	6
10.11	2	3	8	4	2
8.9	1	+	2	3	2
6.7	0	+	1	+	+
4.5	0	0	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

370

39

≥ 34
0
0
2
2
4
+
+
0
0
0

293

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	+	0
22.23	0	1	2	1	+
20.21	2	3	5	1	0
18.19	1	7	9	2	1
16.17	1	7	9	4	1
14.15	2	6	5	2	1
12.13	+	6	7	4	2
10.11	+	2	2	1	+
8.9	0	0	+	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

529

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	+	+	0
12.13	0	1	2	2	1
10.11	1	3	8	10	4
8.9	1	6	14	14	8
6.7	1	3	9	5	5
4.5	+	+	1	+	+
2.3	0	0	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

640

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	0	0	0
12.13	+	+	+	+	0
10.11	1	3	7	4	+
8.9	2	8	22	11	4
6.7	+	6	11	9	3
4.5	0	1	2	3	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

660

43

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	+	1	0	0
8.9	+	2	1	+	0
6.7	0	3	6	4	1
4.5	1	15	11	7	3
2.3	1	10	15	10	2
0.1	+	2	2	1	1
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

254

44

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
6.7	0	2	1	0	0
4.5	2	8	20	12	0
2.3	1	5	29	18	0
0.1	0	1	2	1	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0

133

45

WIND SPEED (KTS)

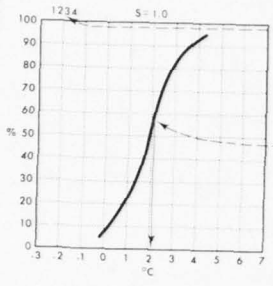
TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
4.5	0	0	3	0	0
2.3	0	21	10	24	3
0.1	7	17	10	3	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0

29

ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

SEA



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

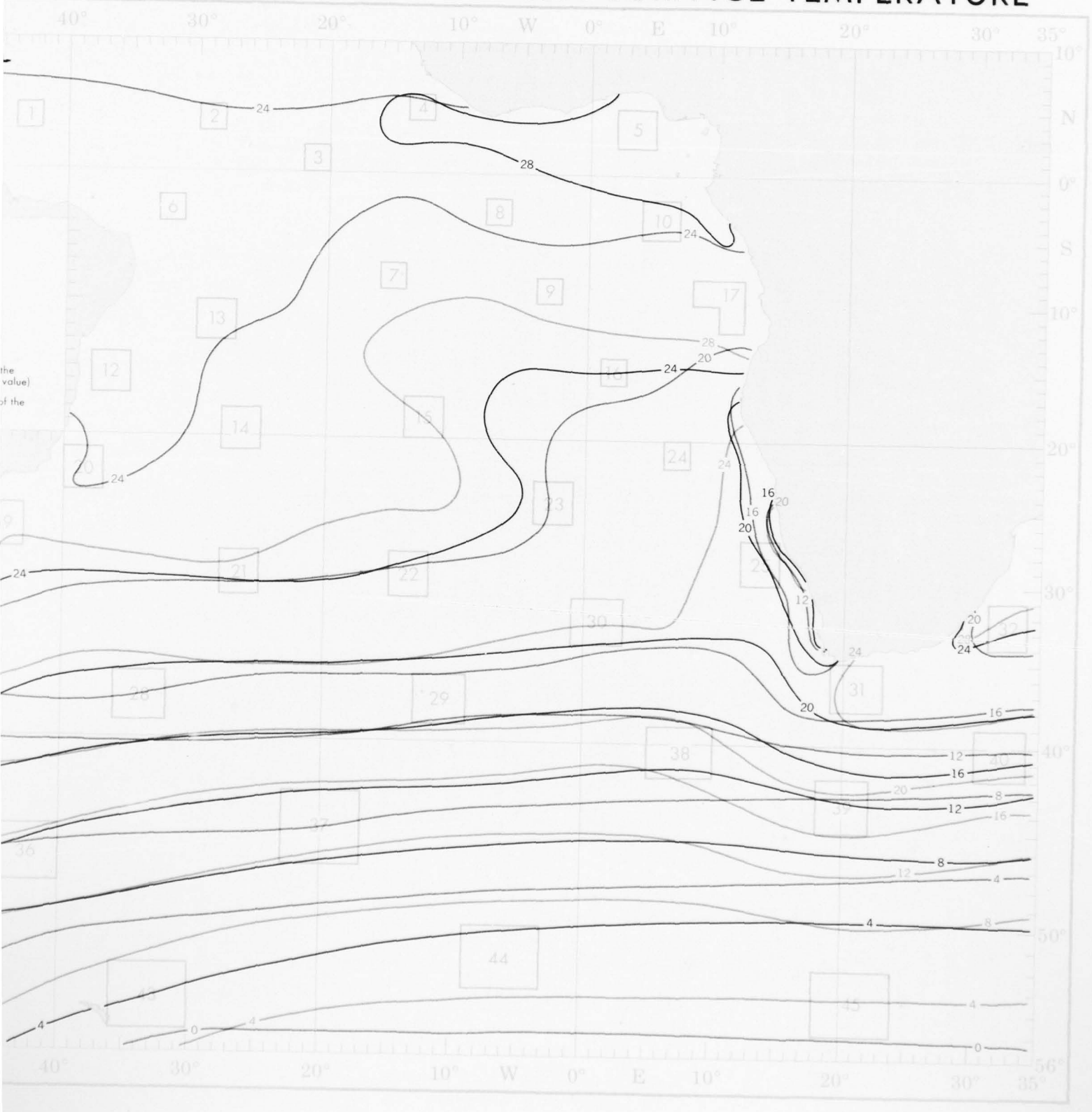
S - Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

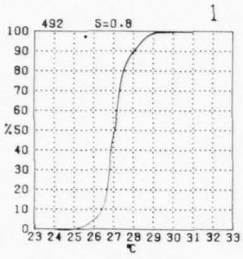
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

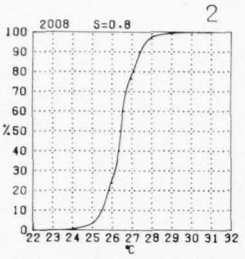
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

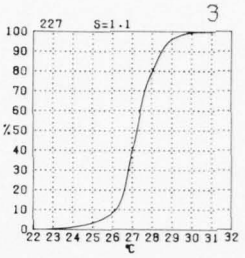
SEA SURFACE TEMPERATURE

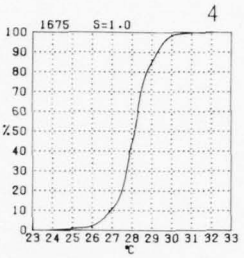


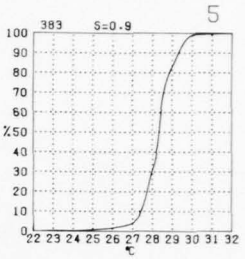
SEA SURFACE TEMPERATURE

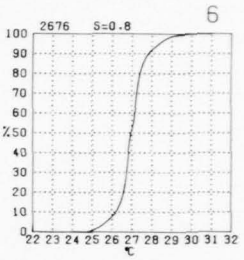


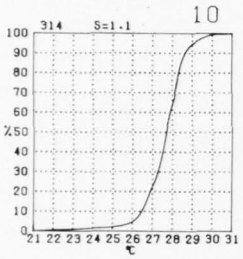


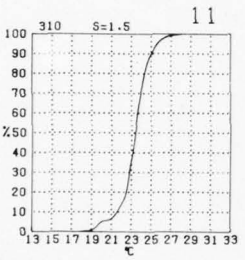


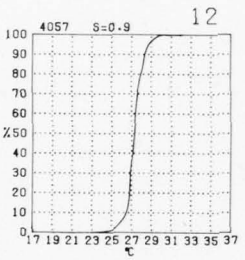


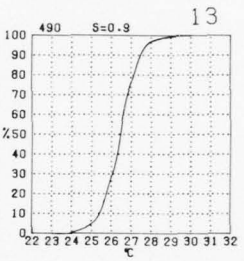


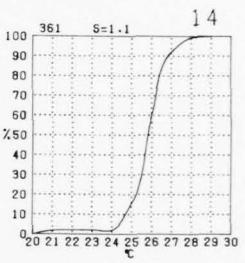


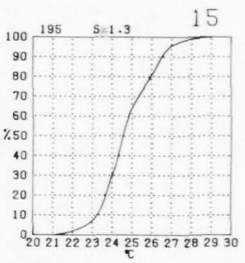


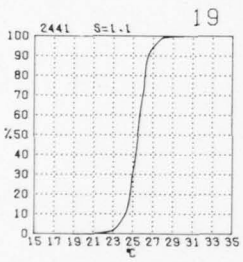


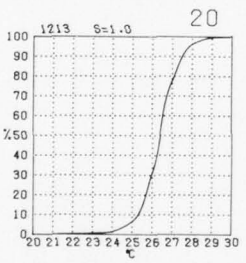


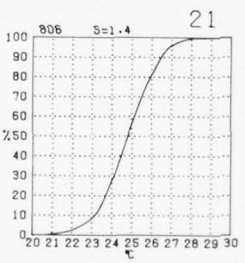


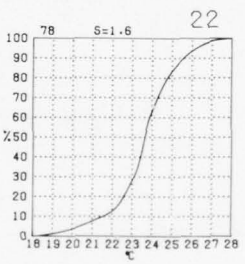


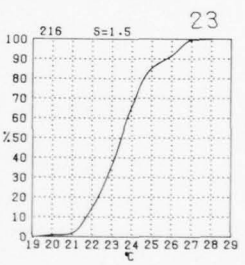


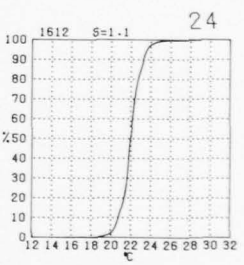


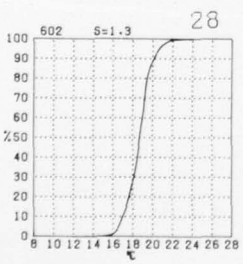


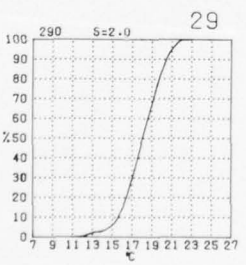


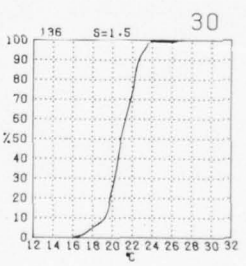


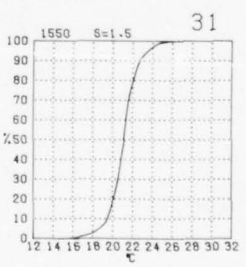


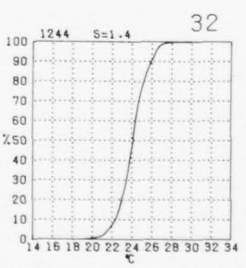


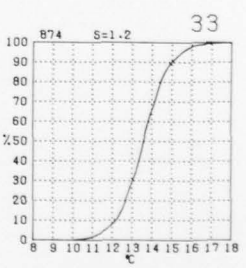


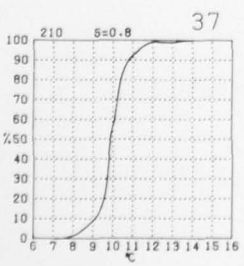


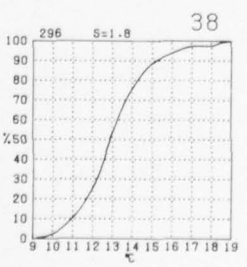


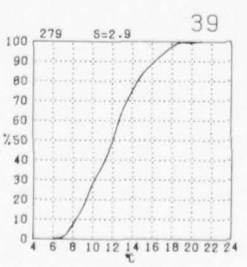


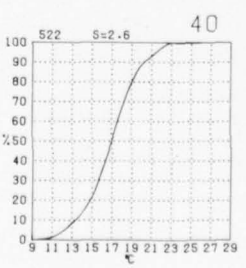


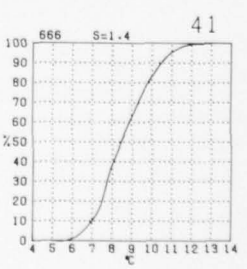


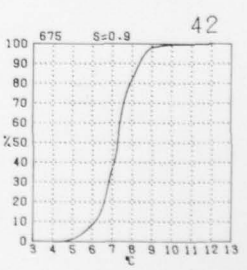








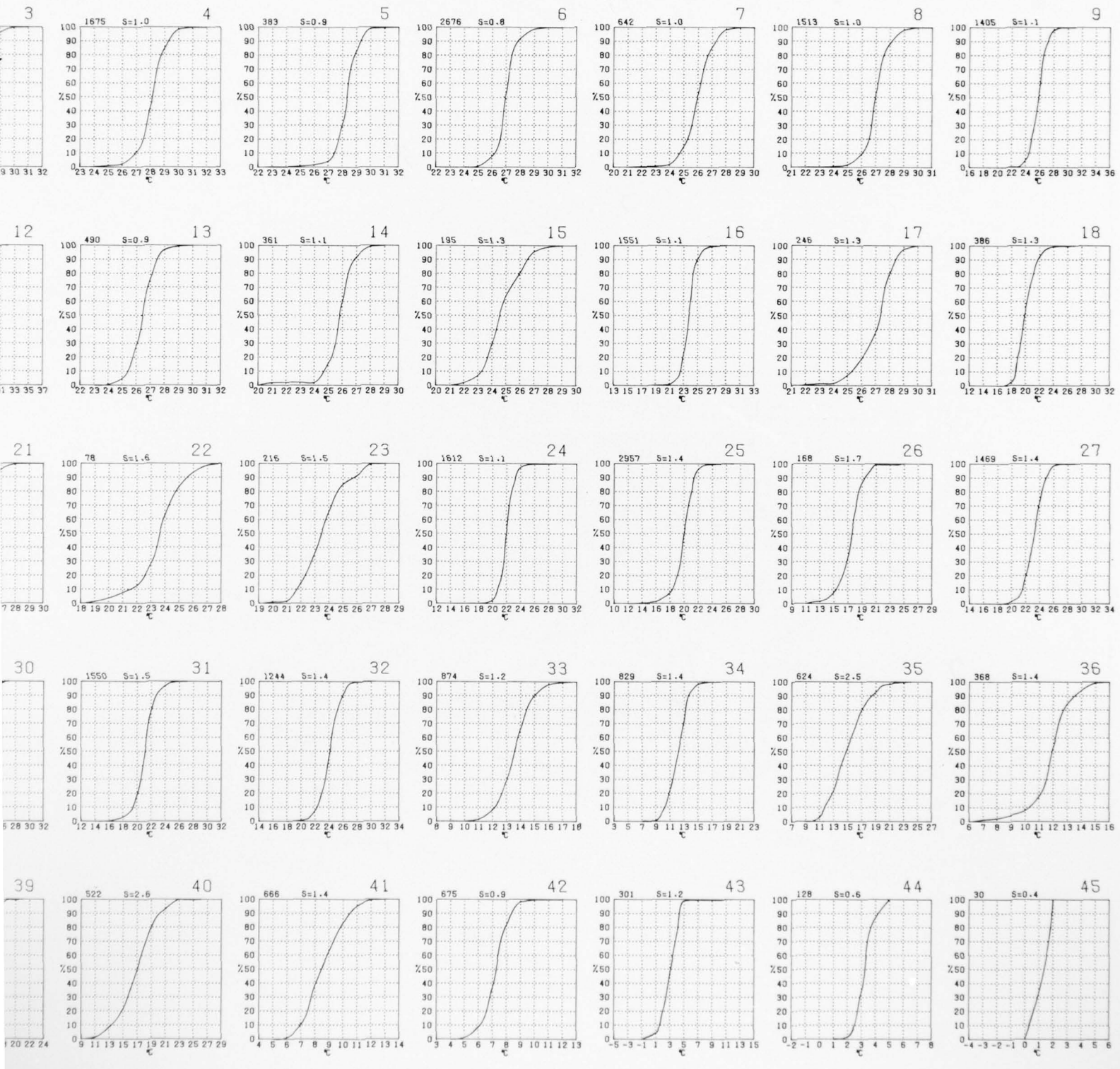




Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

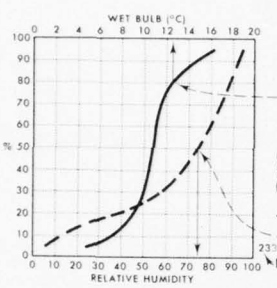
ATURE

FEBRUARY



resent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

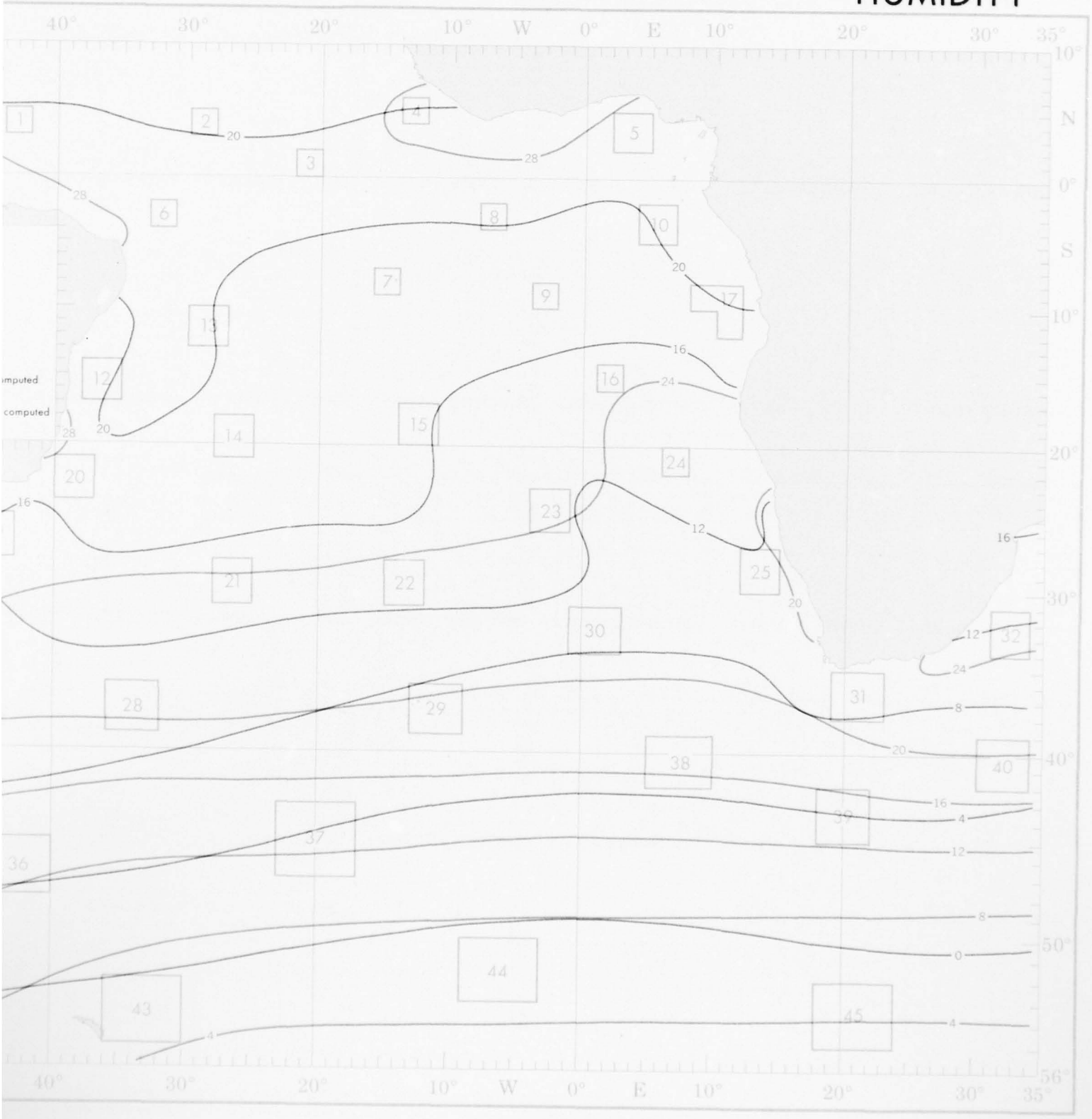
(50% of all observed relative humidities were ≤74%.)

Number of observations.

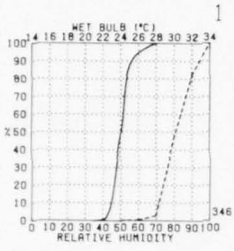
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

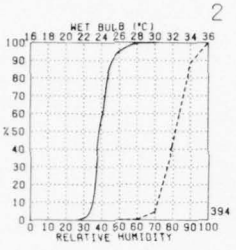
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

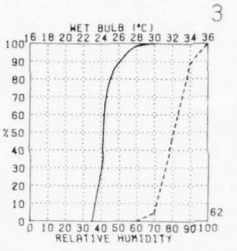
HUMIDITY

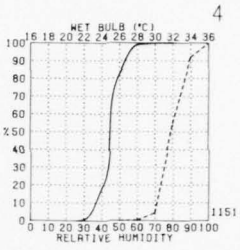

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 28 16 24 12 8 4 0
imputed
computed

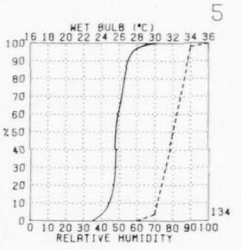
WET BULB AND RELATIVE HUMIDITY

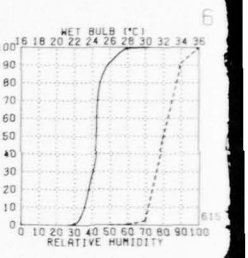


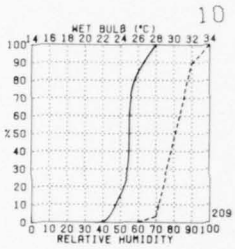


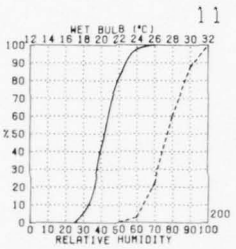


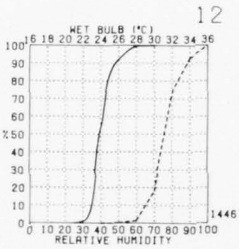


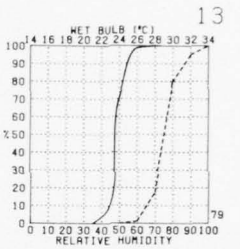


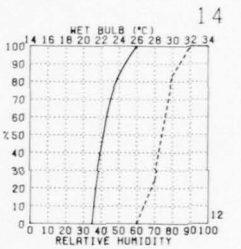


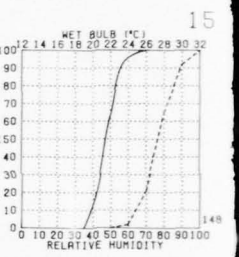


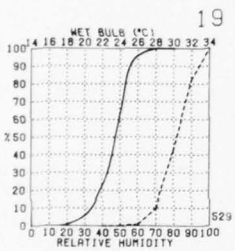


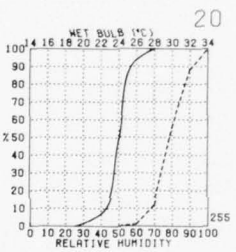


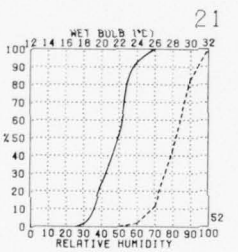


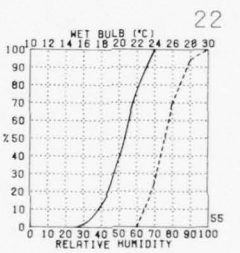


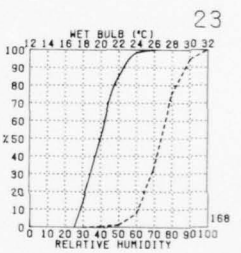


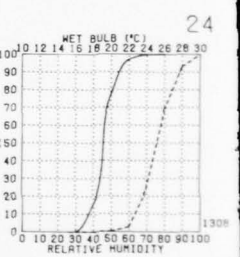


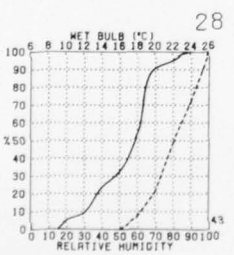


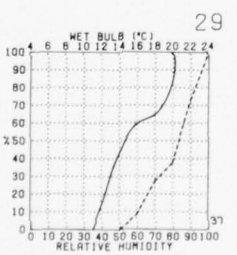


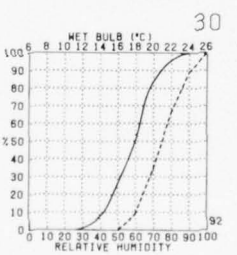


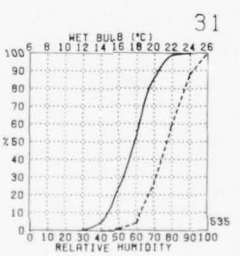


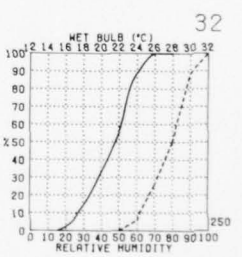


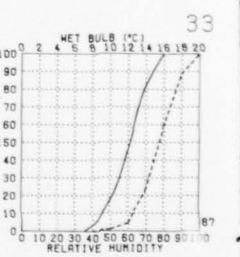


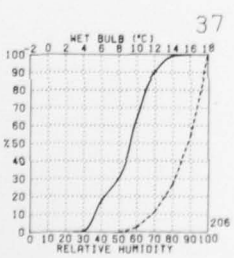


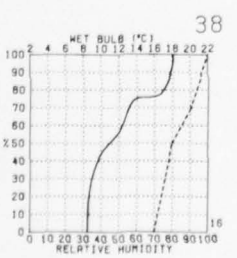


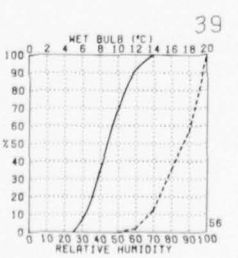


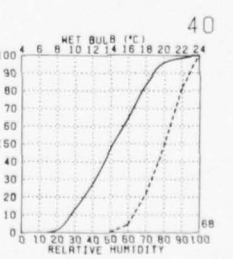


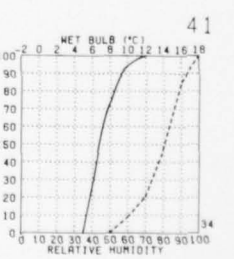


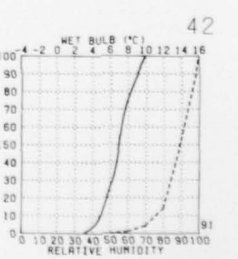










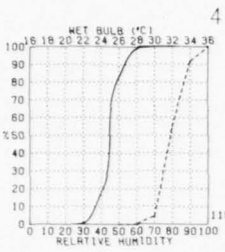


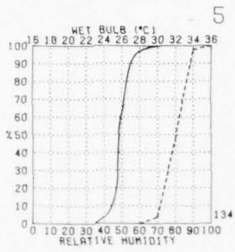
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

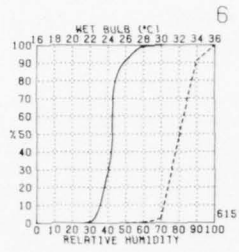
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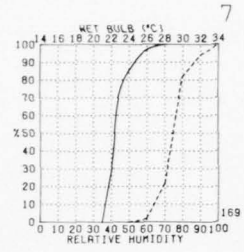
FEBRUARY

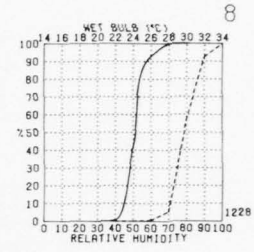


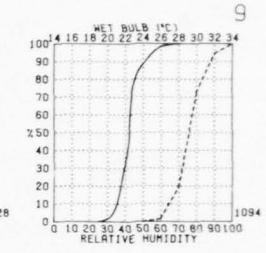




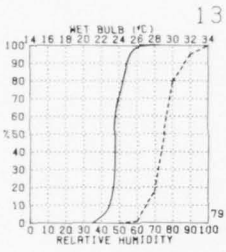


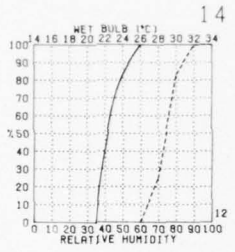


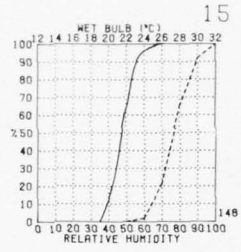


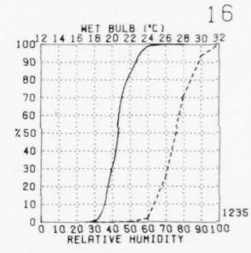


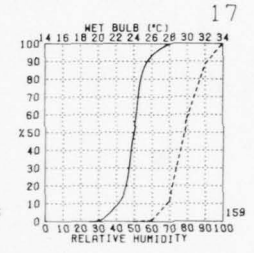


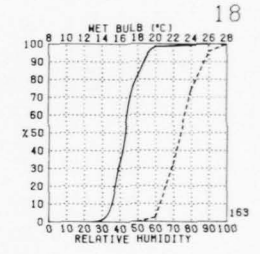




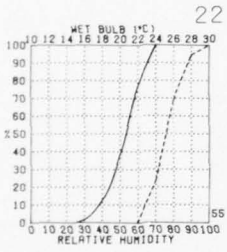


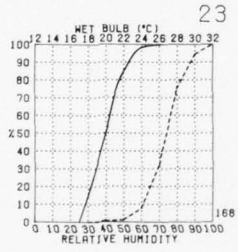


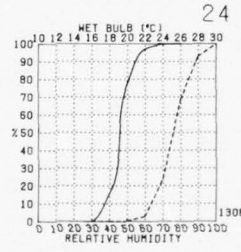


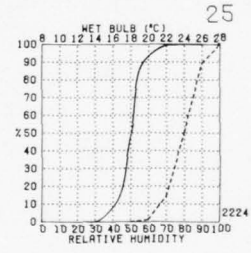


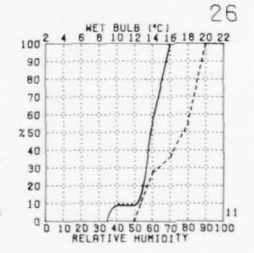


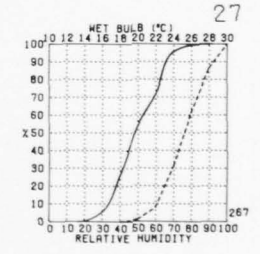




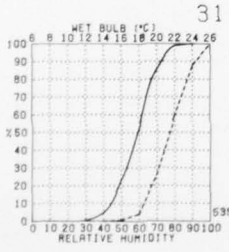


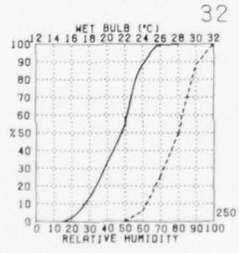


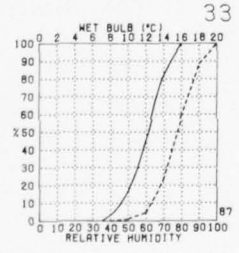


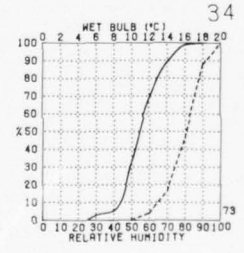


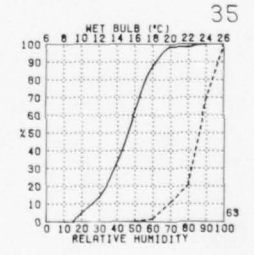








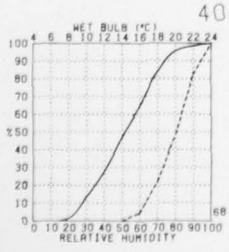


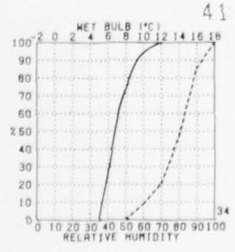


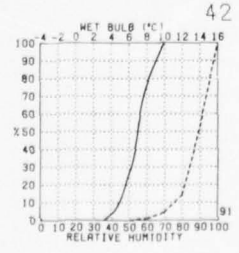
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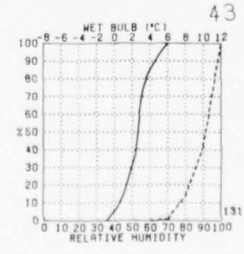
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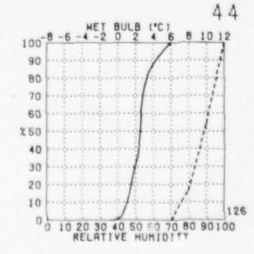


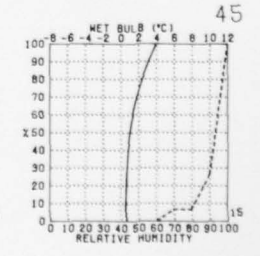






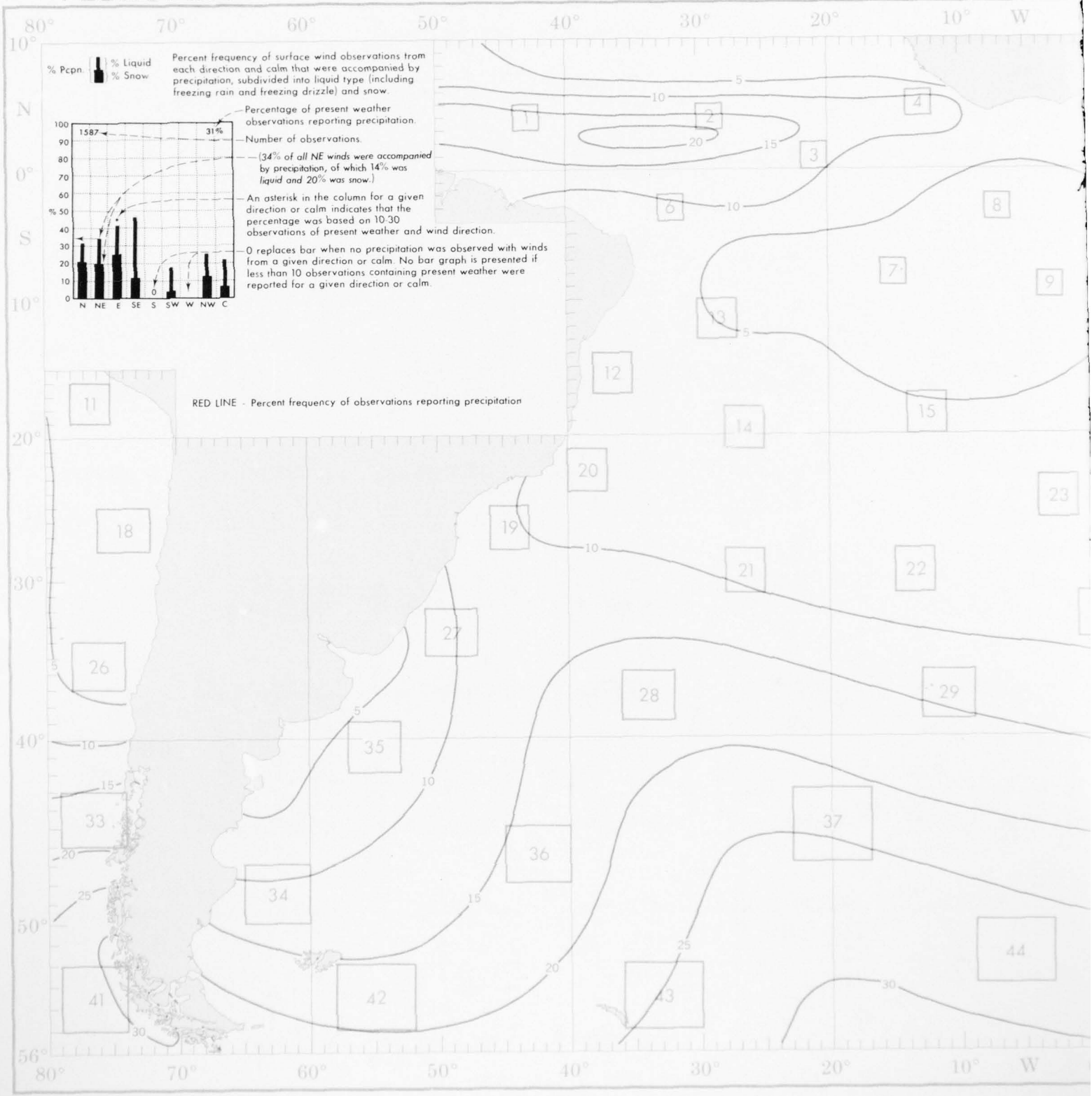




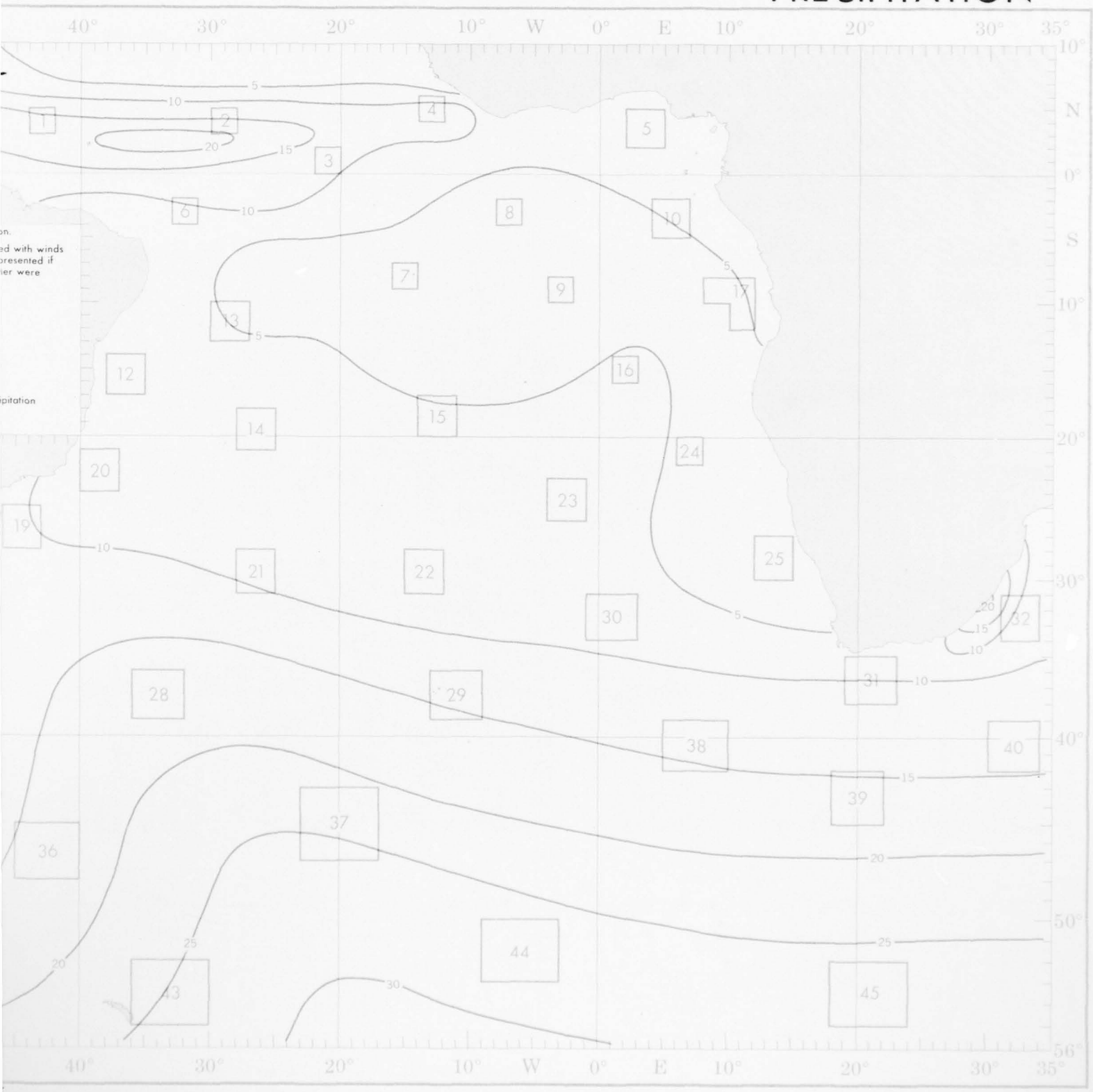


ient the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY


% Pcpn.
% Liquid
% Snow
Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.
Percentage of present weather observations reporting precipitation.
Number of observations.
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)
An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.
1587
31%
N NE E SE S SW W NW C
RED LINE - Percent frequency of observations reporting precipitation
80° 70° 60° 50° 40° 30° 20° 10° W
10° N 0° S 10° 20° 30° 40° 50° 56°

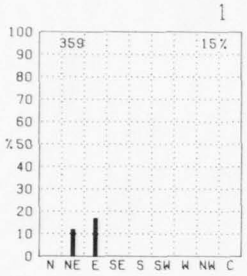
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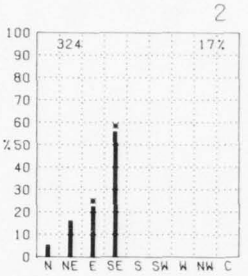


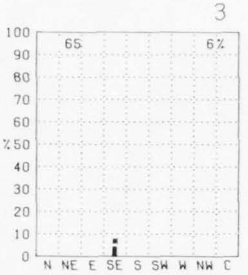
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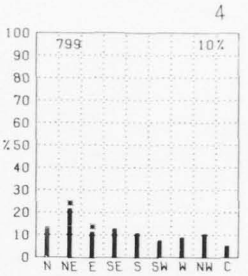
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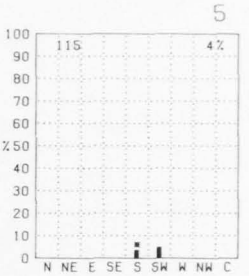
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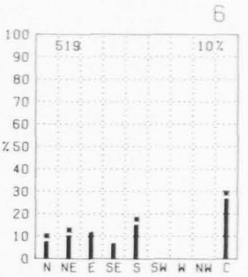


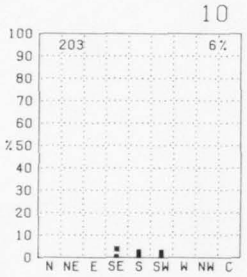


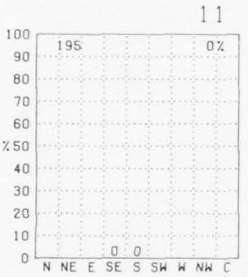


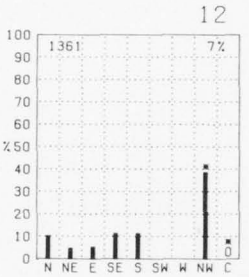


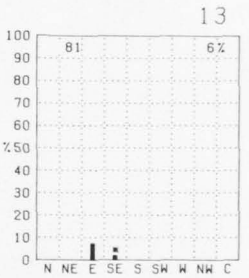






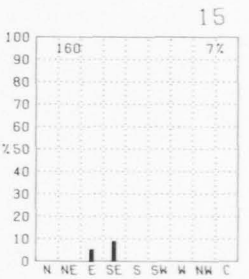


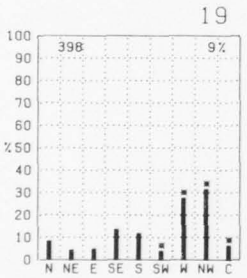


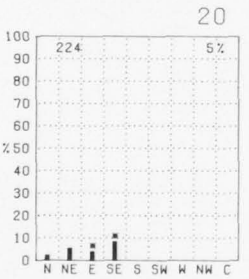


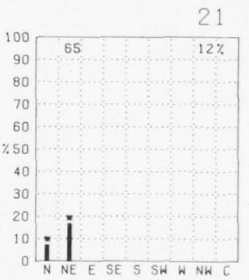
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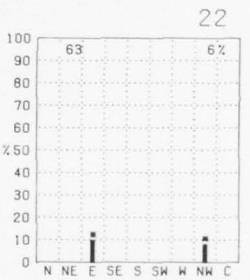
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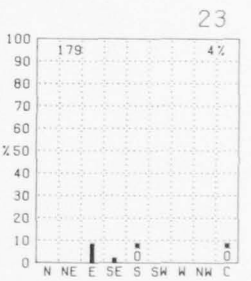


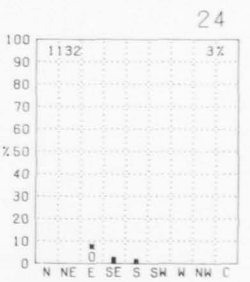


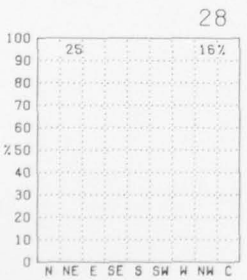


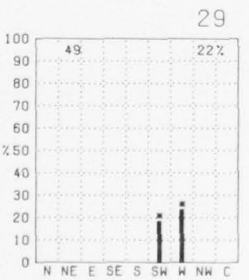


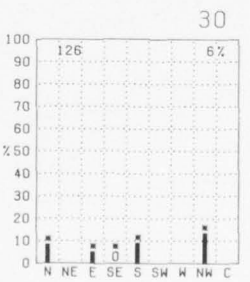


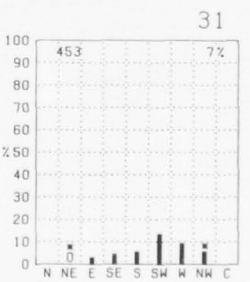


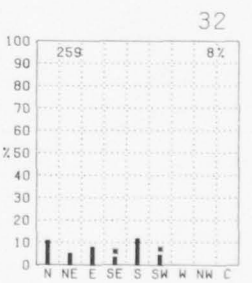


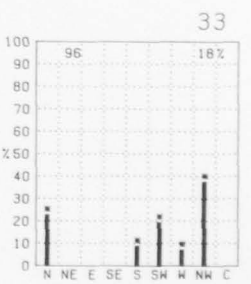


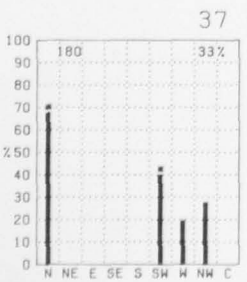






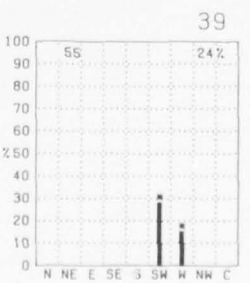


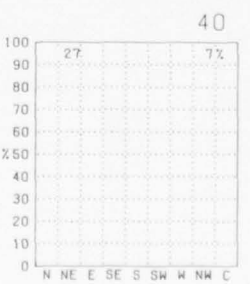


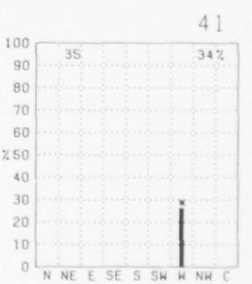


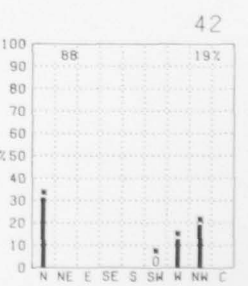
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INSUFFICIENT DATA



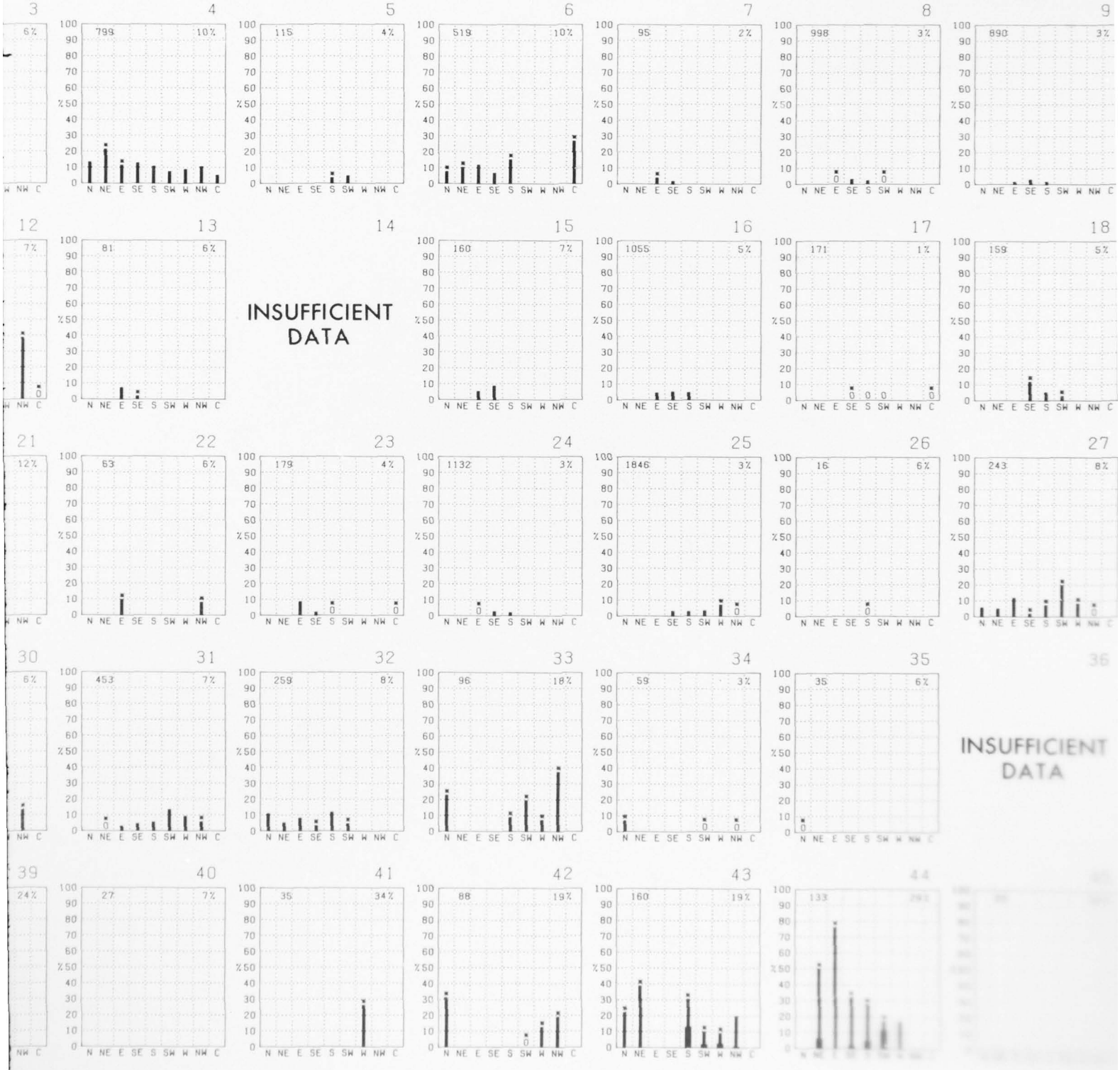






Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

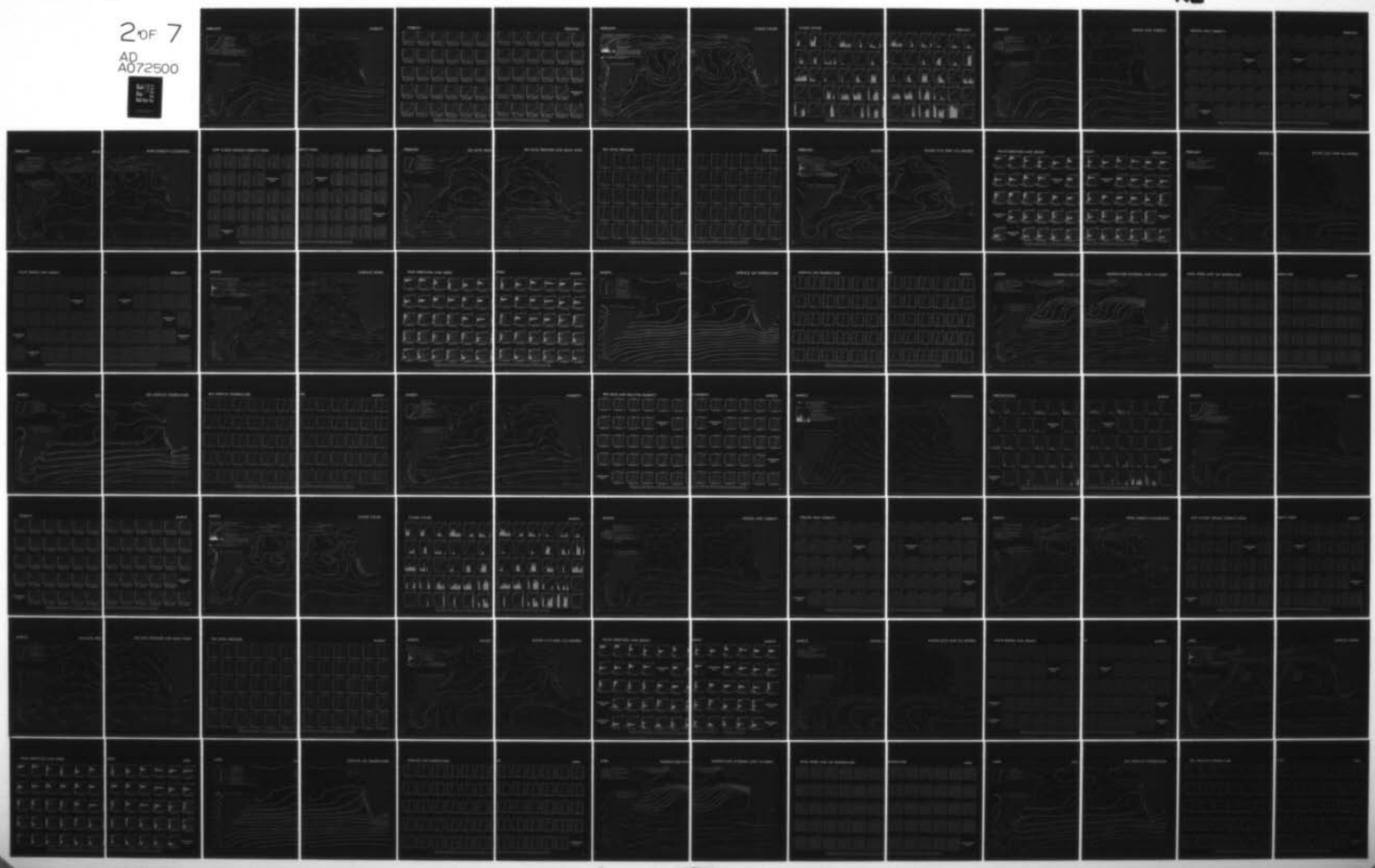
FEBRUARY

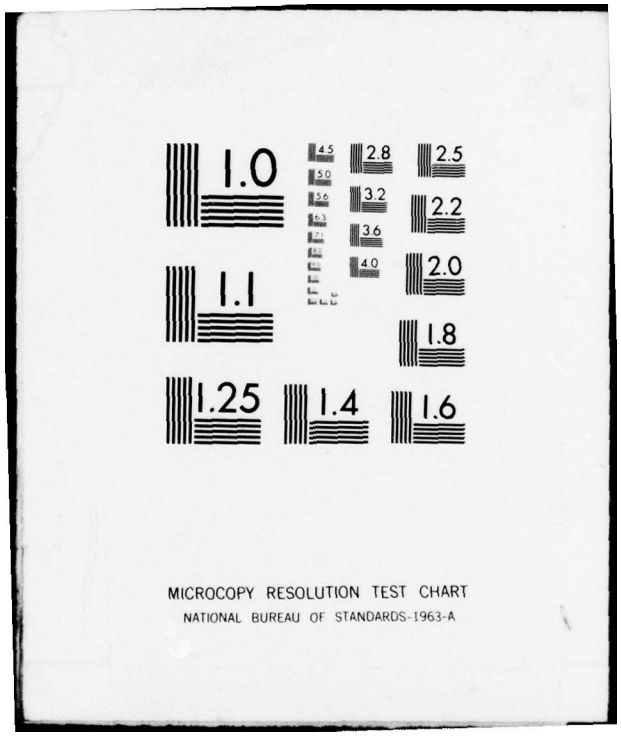


esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

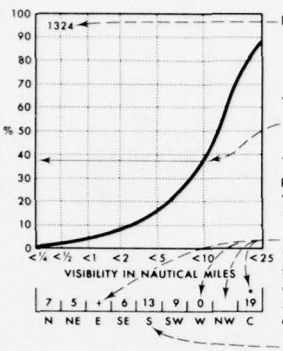
AD-A072 500 NAVAL AIR SYSTEMS COMMAND WASHINGTON DC F/G 4/2
U. S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD. VOLUME IV. SOUTH--ETC(U)
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MICROCOPY RESOLUTION TEST CHART
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FEBRUARY



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

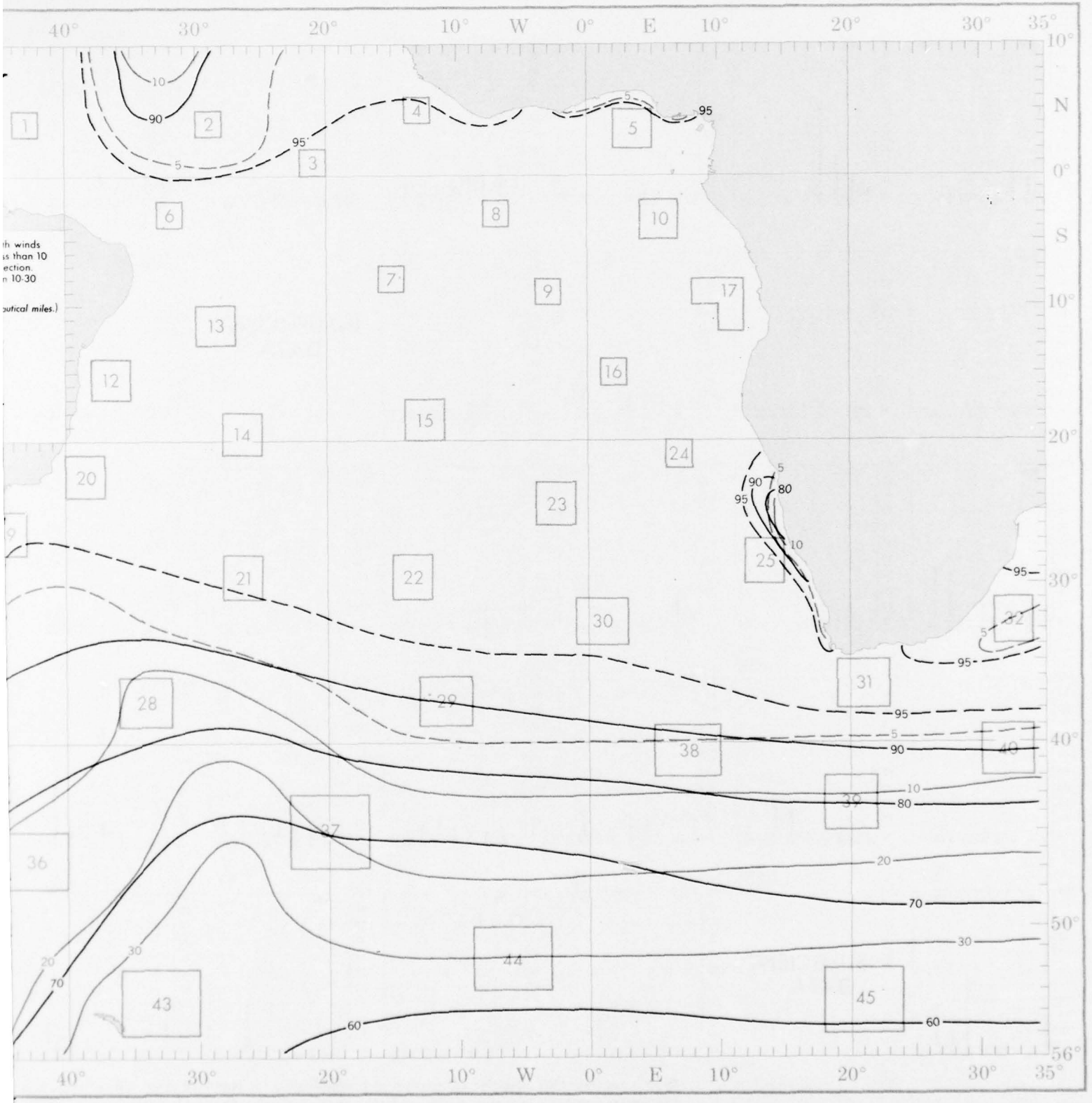
+ indicates < 5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

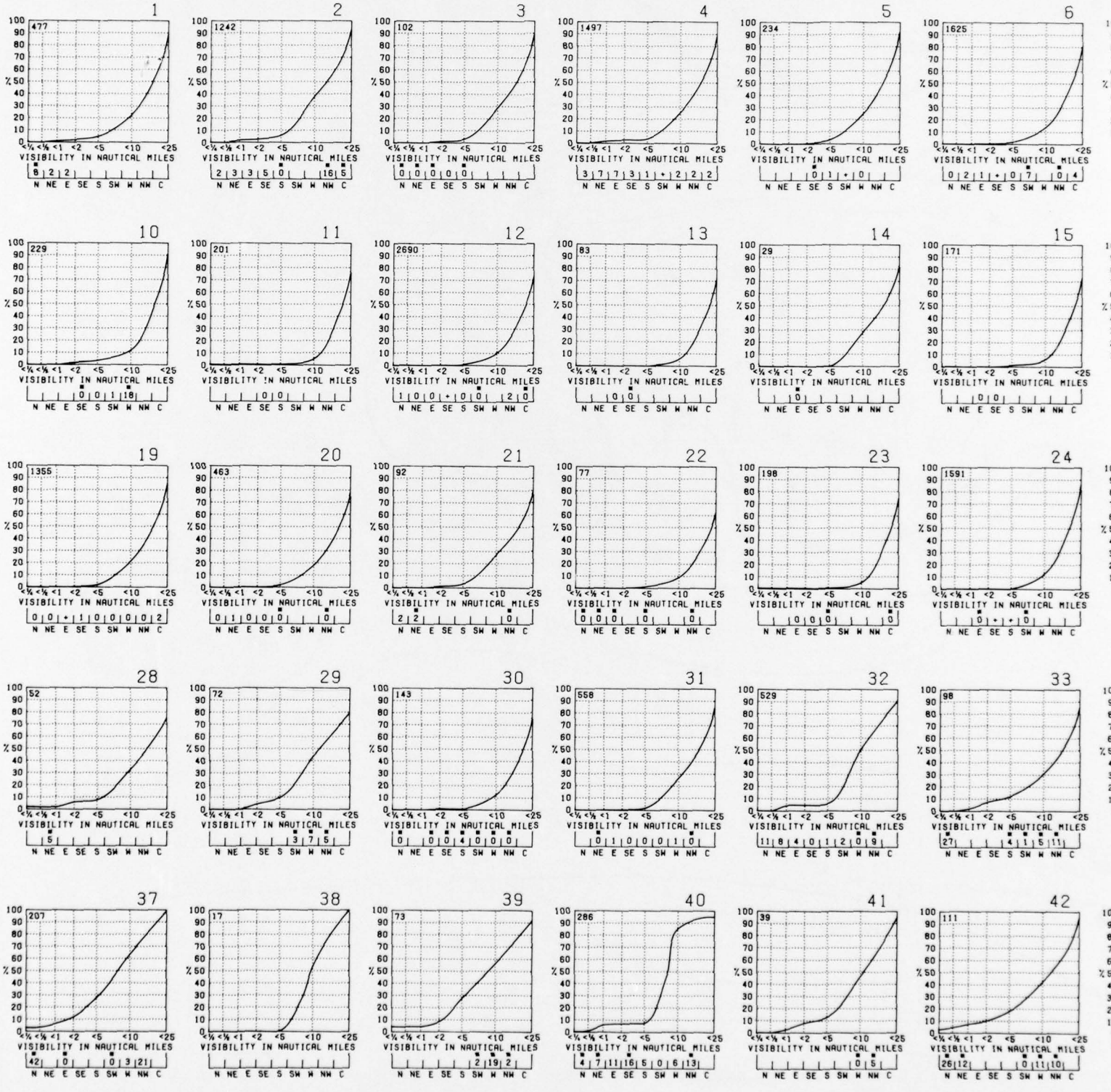
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

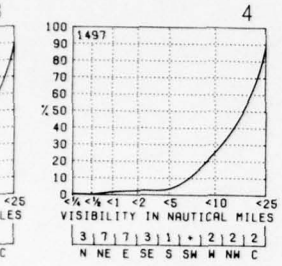

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S
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30°
40°
50°
56°
1
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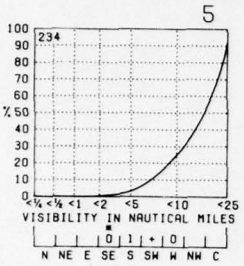
VISIBILITY

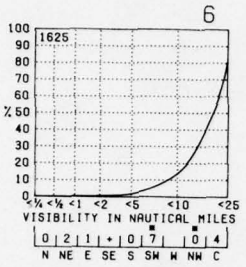


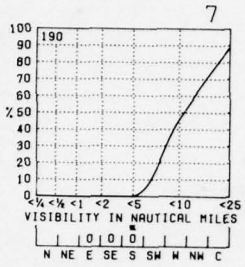
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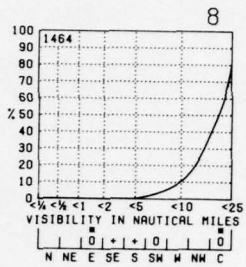
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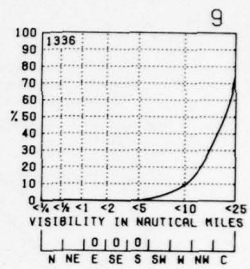


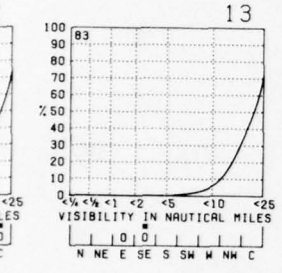


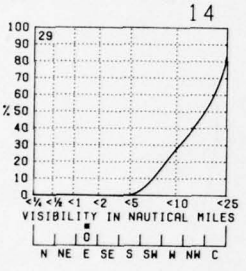


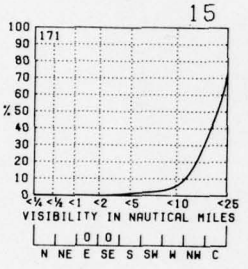


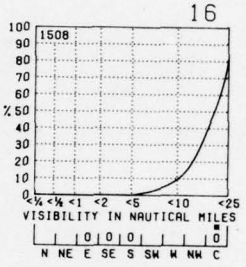


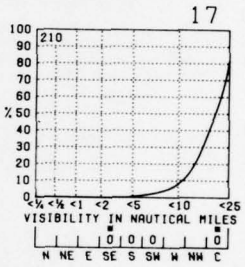


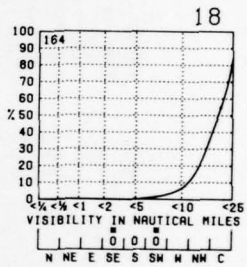


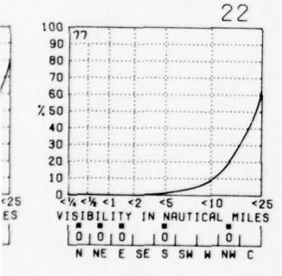


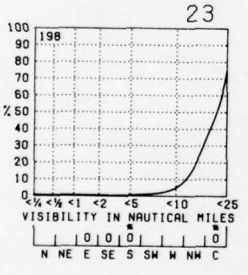


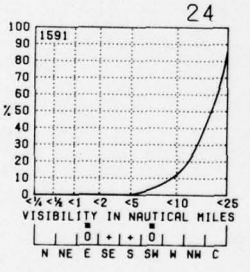


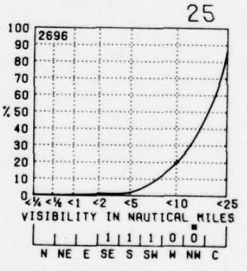


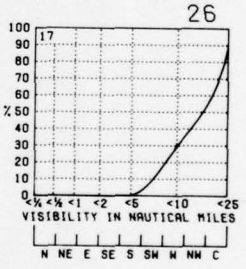


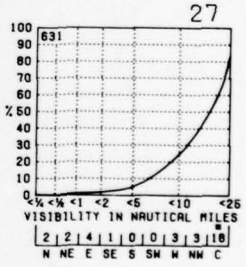


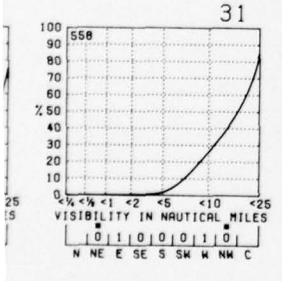


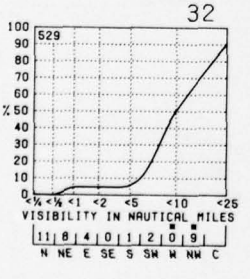


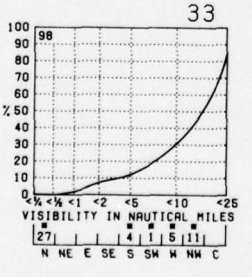


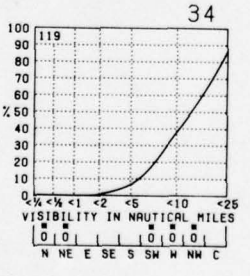


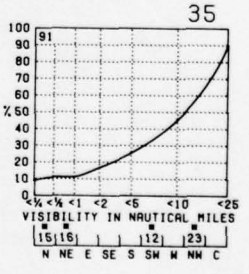






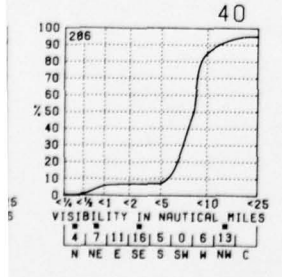


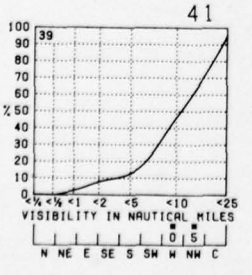


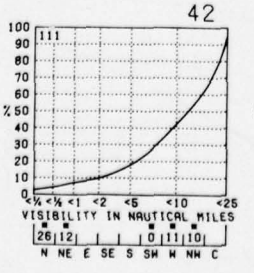


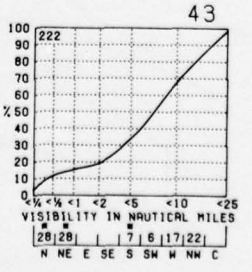
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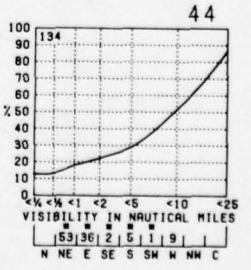
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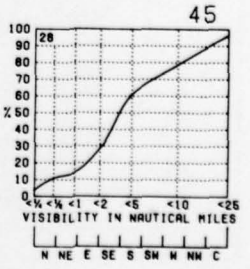






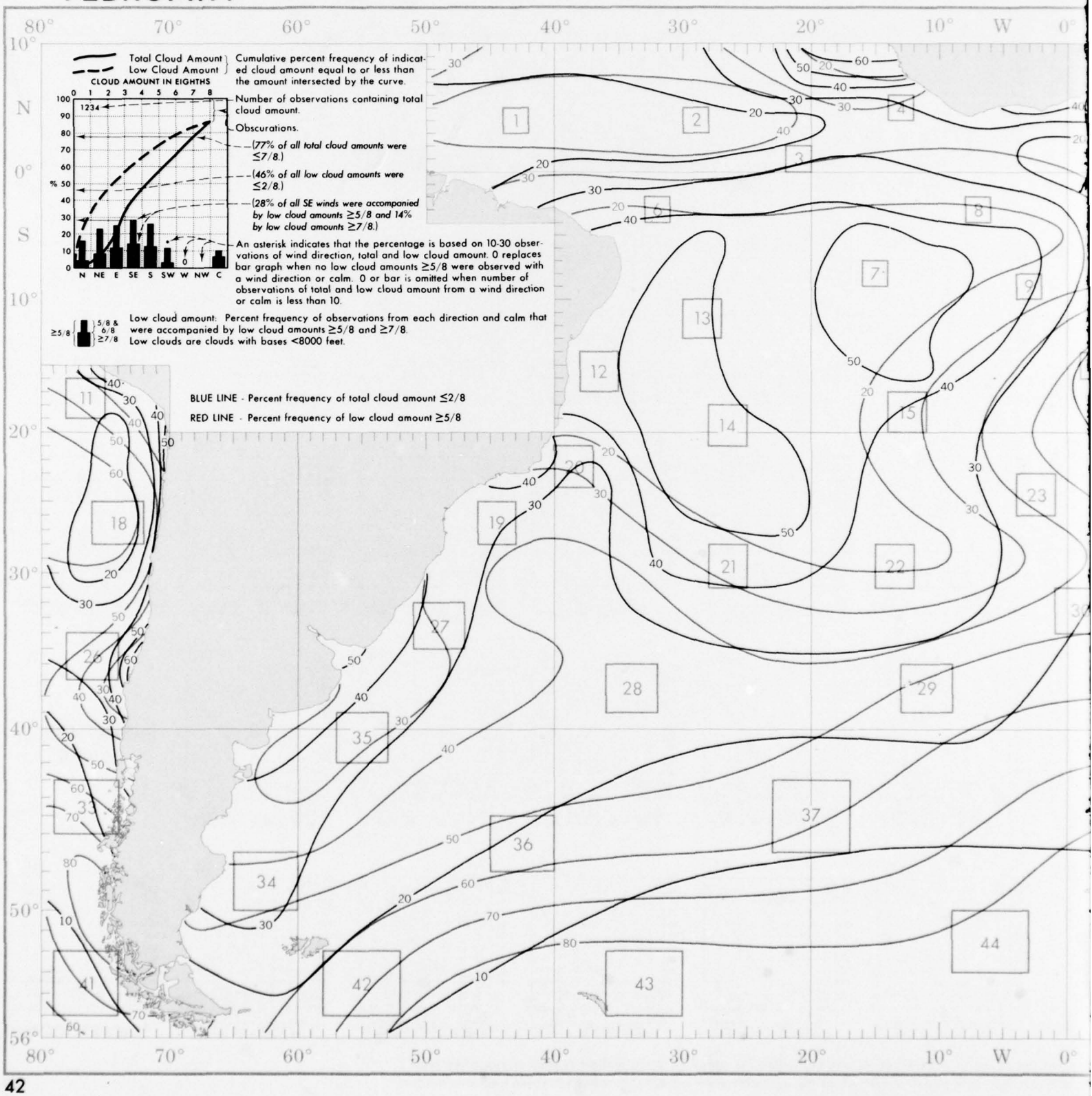




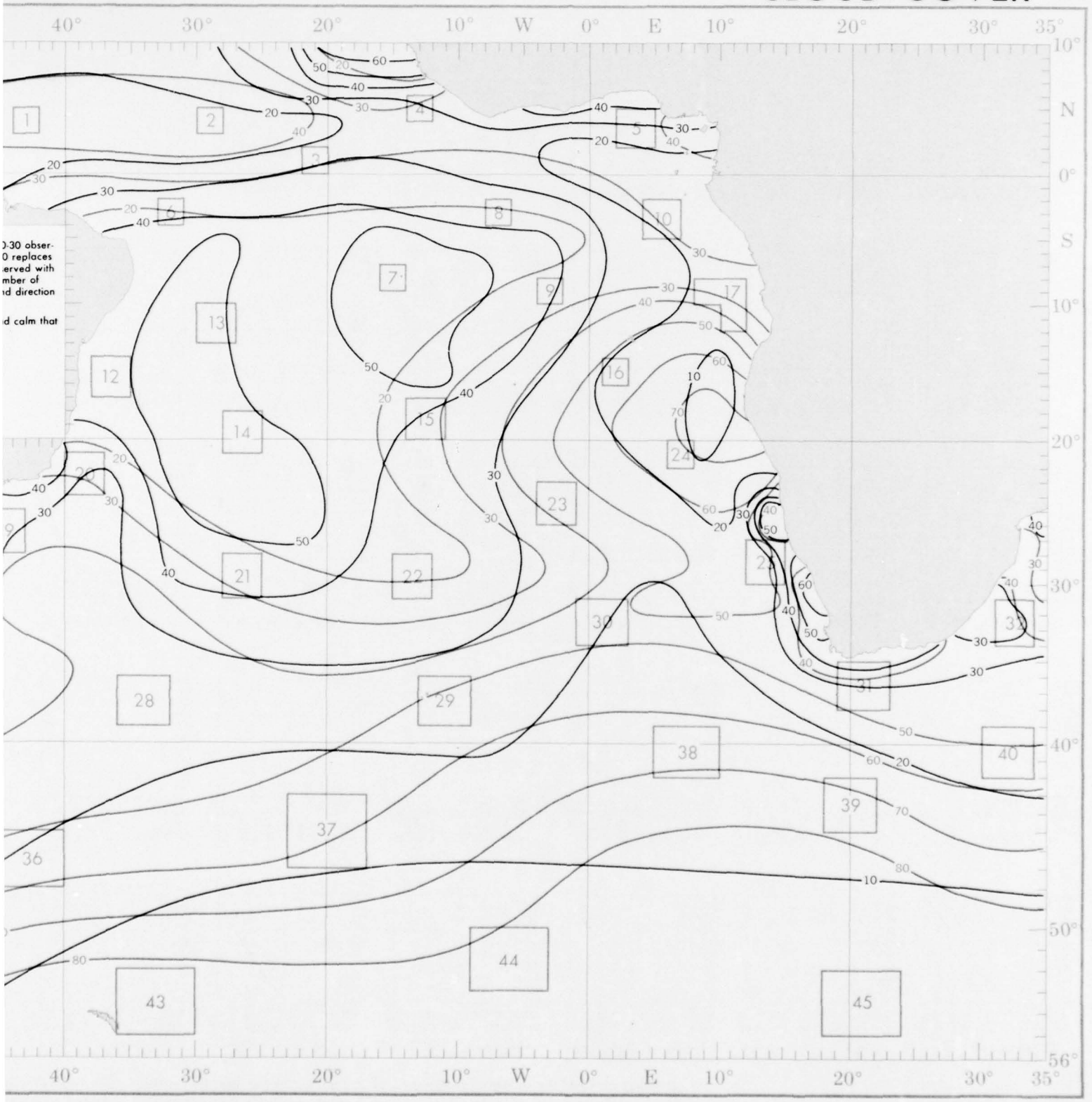


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FEBRUARY


Total Cloud Amount
Low Cloud Amount
Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.
CLOUD AMOUNT IN EIGHTHS
0 1 2 3 4 5 6 7 8
1234
100
90
80
70
60
% 50
40
30
20
10
0
N NE E SE S SW W NW C
Number of observations containing total cloud amount.
Obscurations.
(77% of all total cloud amounts were ≤7/8.)
(46% of all low cloud amounts were ≤2/8.)
(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)
An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.
≥5/8
5/8 & 6/8
≥7/8
Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.
BLUE LINE - Percent frequency of total cloud amount ≤2/8
RED LINE - Percent frequency of low cloud amount ≥5/8
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

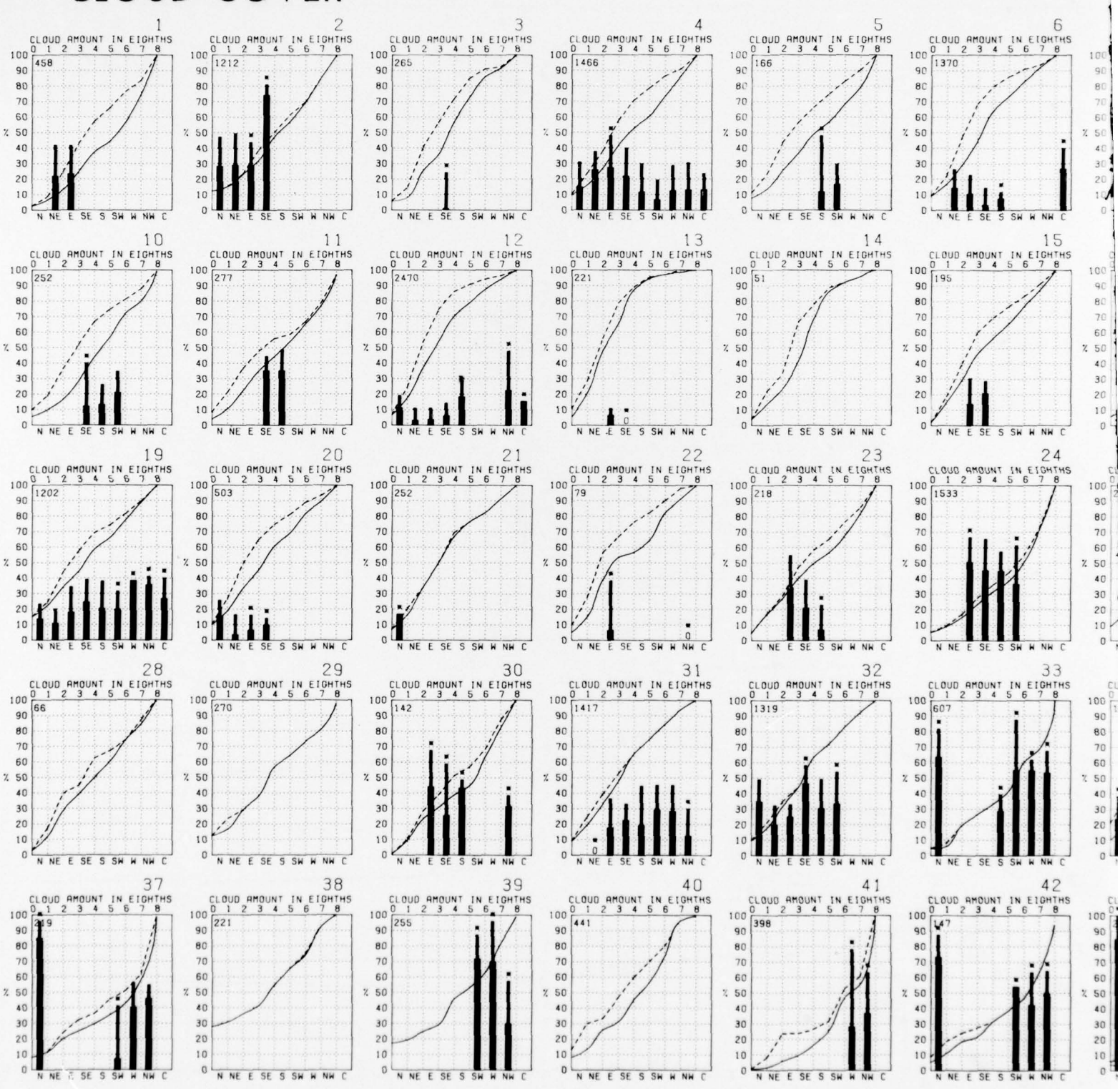
CLOUD COVER



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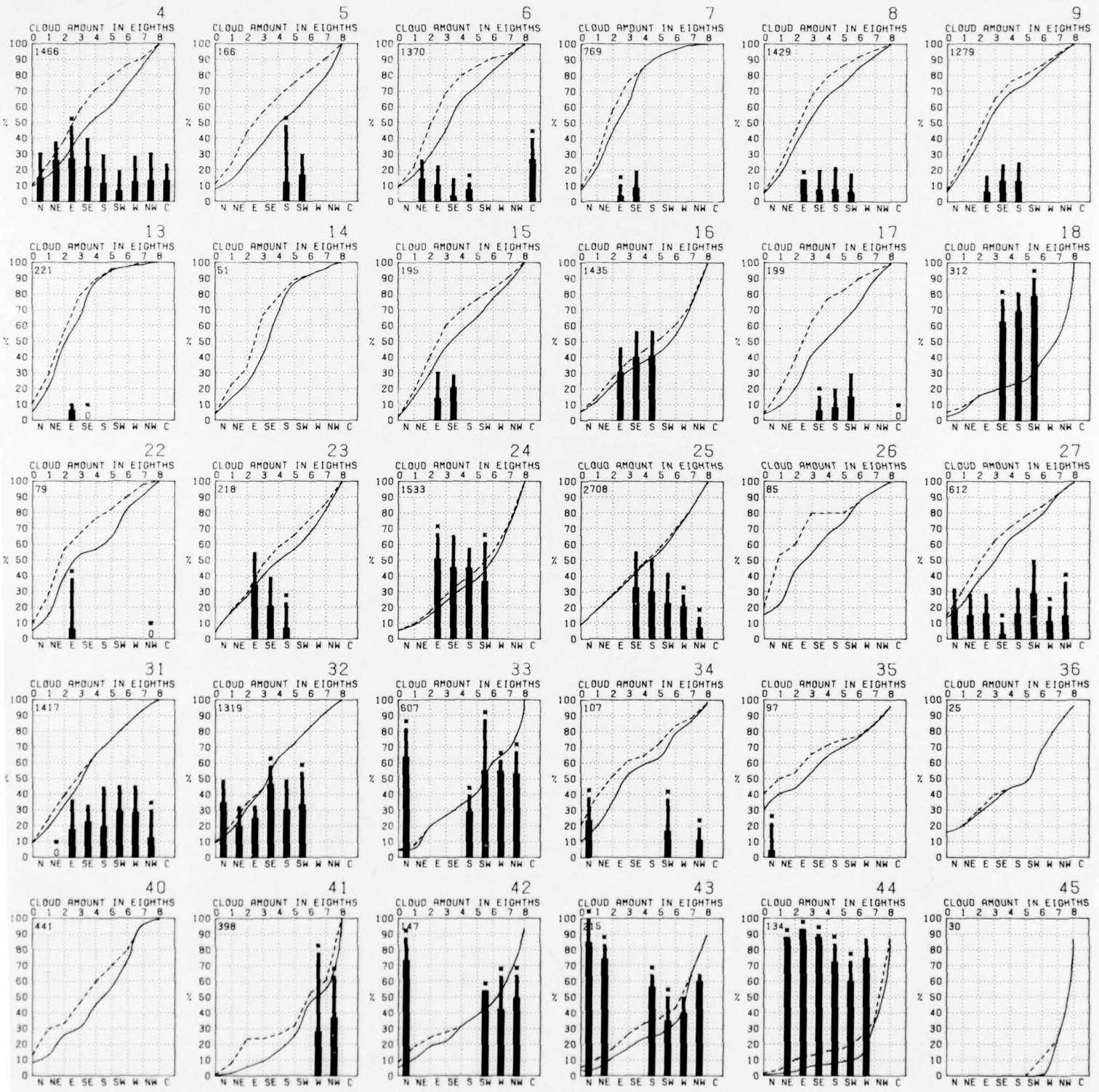
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CLOUD COVER



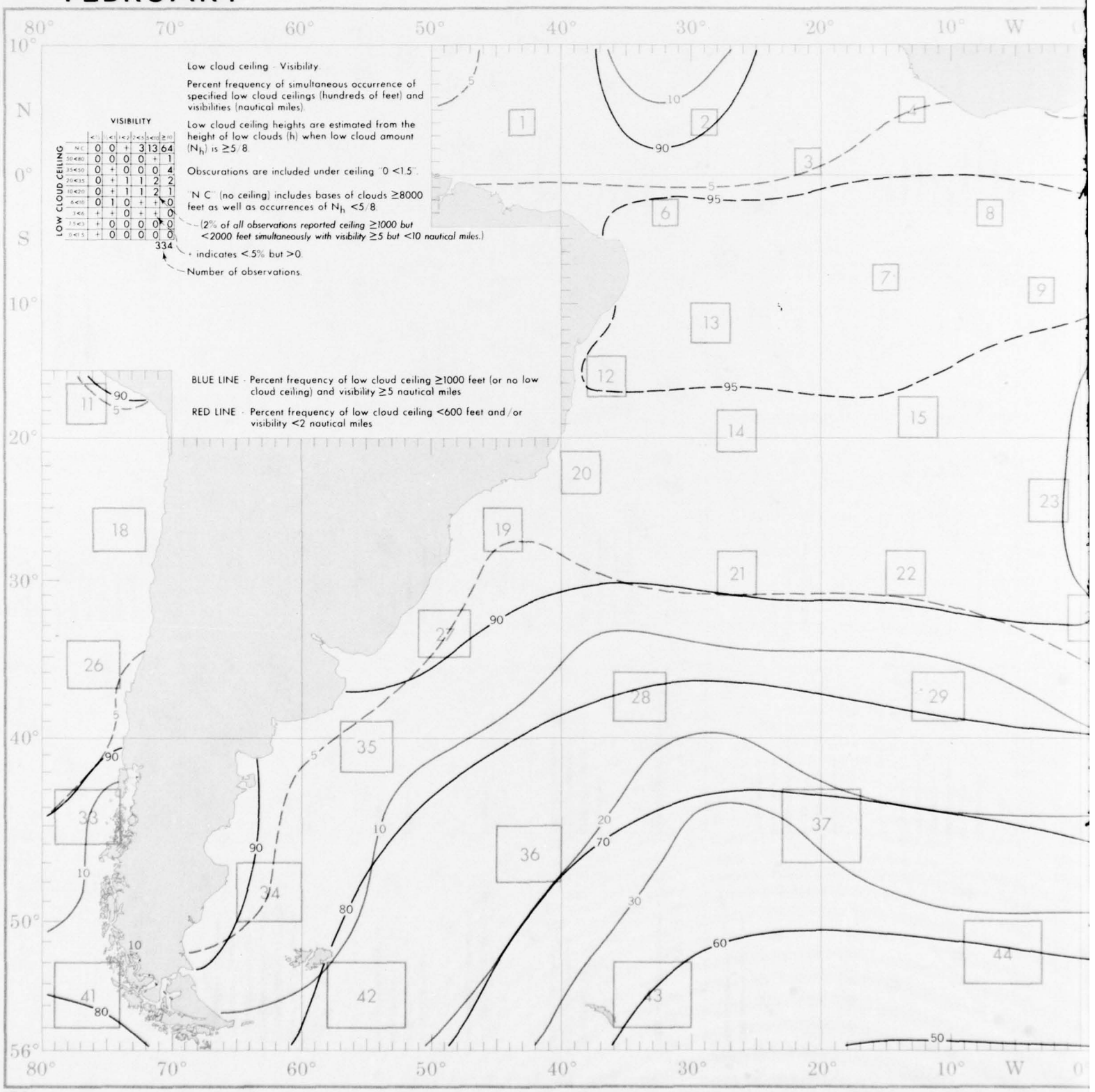
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

FEBRUARY



e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates < 5% but >0.
Number of observations.
VISIBILITY
LOW CLOUD CEILING
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 6 7 8 9 11 12 13 14 15 18 19 20 21 22 23 24 25 26 27 28 29 33 34 35 36 37 41 42 43 44
5 10 90 95 80 70 60 50 30 20

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	55
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	1	5
10<20	0	0	+	+	3	13
6<10	0	0	1	1	3	10
3<6	0	0	0	0	1	1
1.5<3	0	0	0	+	0	+
0<1.5	0	+	0	0	1	+

353

2

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	46
50<80	0	0	0	0	+	2
35<50	0	0	0	0	1	4
20<35	0	0	0	+	2	7
10<20	0	0	0	+	2	14
6<10	0	0	0	+	4	9
3<6	0	0	0	1	1	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	+	+

364

3

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	70
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	2
10<20	0	0	0	2	0	11
6<10	0	0	0	0	2	8
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

66

4

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	9	63
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	5
10<20	0	0	0	+	2	9
6<10	0	0	0	+	1	3
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	0

974

5

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	8	61
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	3	4
10<20	0	0	0	0	3	10
6<10	0	0	0	1	0	3
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

115

6

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	78
50<80	0	0	0	0	0	+
35<50	0	0	0	0	+	1
20<35	+	0	0	0	+	5
10<20	0	+	0	0	1	7
6<10	0	0	0	+	0	3
3<6	0	0	+	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

567

10

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	67
50<80	0	0	0	0	1	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	8
10<20	0	0	1	1	2	8
6<10	0	0	1	1	0	4
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

192

11

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	52
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	15
10<20	0	0	0	0	1	13
6<10	0	0	0	0	0	8
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	0	0

183

12

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	83
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	2
20<35	0	0	0	+	+	3
10<20	0	0	0	+	1	4
6<10	0	+	+	+	1	2
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	0	0

1397

13

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	84
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	7
10<20	0	0	0	0	0	2
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

61

14

INSUFFICIENT DATA

15

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	69
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	5
10<20	0	0	0	0	1	13
6<10	0	0	0	1	2	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

149

19

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	65
50<80	0	0	0	0	1	2
35<50	0	0	0	+	1	3
20<35	0	0	+	+	1	6
10<20	0	0	0	1	2	6
6<10	0	0	0	0	2	4
3<6	0	0	+	+	+	+
1.5<3	0	0	0	0	+	0
0<1.5	0	0	+	+	+	0

463

20

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	71
50<80	0	0	0	0	0	+
35<50	0	0	0	0	1	1
20<35	0	0	0	2	1	8
10<20	0	0	0	+	0	6
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

223

21

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	0	70
50<80	0	0	0	0	0	0
35<50	0	0	0	0	2	0
20<35	0	0	0	0	0	0
10<20	0	0	2	0	9	13
6<10	0	0	0	0	0	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

47

22

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	78
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	6
6<10	0	0	0	0	0	4
3<6	0	0	0	2	2	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

49

23

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	1	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	7
10<20	0	0	0	0	0	18
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

169

24

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	35
50<80	0	0	0	0	+	3
35<50	0	0	0	0	+	6
20<35	0	0	0	0	1	15
10<20	+	0	0	+	2	26
6<10	0	0	0	0	1	8
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	0	+

1192

28

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	8	56
50<80	0	0	0	0	0	3
35<50	0	0	0	0	6	3
20<35	0	0	0	0	0	0
10<20	0	0	3	0	6	14
6<10	0	0	0	0	3	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

36

29

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	33
50<80	0	0	0	0	3	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	7
10<20	0	0	0	0	13	23
6<10	0	0	0	0	10	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

30

30

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	50
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	12
10<20	0	0	1	0	3	17
6<10	0	0	0	0	2	9
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

102

31

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	57
50<80	0	0	0	0	0	0
35<50	0	0	0	+	0	1
20<35	0	+	+	0	1	11
10<20	0	0	0	+	3	14
6<10	0	0	0	1	2	5
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

311

32

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	51
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	+	2	7
10<20	0	0	0	0	3	13
6<10	0	0	+	1	4	8
3<6	0	0	0	+	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

243

33

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	1	0	0	3	28
50<80	0	0	0	0	0	0
35<50	0	0	1	0	0	0
20<35	0	0	0	0	6	16
10<20	0	0	0	2	2	9
6<10	0	0	0	0	3	22
3<6	0	0	2	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

87

37

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	13	22
50<80	0	0	0	0	2	2
35<50	0	0	0	0	1	4
20<35	0	0	0	1	2	9
10<20	0	1	1	9	10	6
6<10	0	1	5	4	1	0
3<6	1	1	1	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	0	0	0

181

38

INSUFFICIENT DATA

39

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	9
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	11
10<20	0	0	2	2	15	15
6<10	0	0	3	18	9	2
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	5	0	0	0	0	0

65

40

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	53
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	10
10<20	0	0	0	0	3	7
6<10	3	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	0	0

30

41

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	24
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	0
20<35	0	0	0	0	14	8
10<20	0	0	5	3	3	5
6<10	0	0	0	0	11	16
3<6	0	0	0	3	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	3	0	0	0	0

37

42

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	31
50<80	0	0	0	0	1	2
35<50	0	0	0	0	0	5
20<35	0	1	0	1	7	7
10<20	0	0	1	1	6	17
6<10	0	0	2	2	0	6
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	6	1	0	1	0	0

87

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

FEBRUARY

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	9	63
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	5
10<20	0	0	0	+	2	9
6<10	0	0	0	+	1	3
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	0

974

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	8	61
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	3	4
10<20	0	0	0	0	3	10
6<10	0	0	0	1	0	3
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

115

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	78
50<80	0	0	0	0	0	+
35<50	0	0	0	0	+	1
20<35	+	0	0	0	+	5
10<20	0	+	0	0	1	7
6<10	0	0	0	+	0	3
3<6	0	0	+	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

567

7

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	77
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	2
10<20	0	0	0	0	0	8
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

92

8

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	78
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	0	5
10<20	0	0	0	0	+	9
6<10	0	0	0	0	+	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	+	+	0
0<1.5	0	0	0	0	0	+

1077

9

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	76
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	3
20<35	0	0	0	0	0	7
10<20	0	0	0	0	+	9
6<10	0	0	0	0	+	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

952

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	84
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	7
10<20	0	0	0	0	0	2
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

61

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	69
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	5
10<20	0	0	0	0	1	13
6<10	0	0	0	1	2	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

149

16

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	45
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	13
10<20	0	0	0	+	1	22
6<10	0	0	0	0	1	8
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1112

17

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	76
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	4
20<35	0	0	0	0	0	5
10<20	0	0	0	0	0	9
6<10	0	0	0	0	0	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

164

18

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	21
50<80	0	0	0	0	1	1
35<50	0	0	0	0	0	7
20<35	0	0	0	0	2	23
10<20	0	0	0	0	3	30
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

145

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	78
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	6
6<10	0	0	0	0	0	4
3<6	0	0	0	2	2	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

49

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	1	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	7
10<20	0	0	0	0	0	18
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

169

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	35
50<80	0	0	0	0	+	3
35<50	0	0	0	0	+	6
20<35	0	0	0	0	1	15
10<20	+	0	0	+	2	26
6<10	0	0	0	0	1	8
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	0	+

1192

25

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	45
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	10
10<20	0	0	0	+	3	20
6<10	0	0	0	+	1	7
3<6	0	0	+	+	+	1
1.5<3	0	0	0	+	0	+
0<1.5	0	0	+	+	0	+

1947

26

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	27	53
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	7
10<20	0	0	0	0	0	7
6<10	0	0	0	0	0	0
3<6	0	0	0	0	7	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

27

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	65
50<80	0	0	0	+	1	0
35<50	0	0	+	+	+	2
20<35	0	0	0	0	2	5
10<20	0	0	0	0	+	2
6<10	0	0	0	0	2	3
3<6	0	0	+	0	+	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	+	0

254

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	57
50<80	0	0	0	0	0	0
35<50	0	0	0	+	0	1
20<35	0	+	+	0	1	11
10<20	0	0	0	+	3	14
6<10	0	0	0	1	2	5
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

311

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	51
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	+	2	7
10<20	0	0	0	0	3	13
6<10	0	0	+	1	4	8
3<6	0	0	0	+	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

243

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	1	0	0	3	28
50<80	0	0	0	0	0	0
35<50	0	0	1	0	0	0
20<35	0	0	0	0	6	16
10<20	0	0	0	2	2	9
6<10	0	0	0	0	3	22
3<6	0	0	2	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

87

34

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	10	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	3	2
20<35	0	0	0	2	2	6
10<20	0	0	0	0	0	13
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	2	0	0

62

35

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	11	58
50<80	0	0	0	0	2	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	2	0
10<20	0	0	0	2	2	7
6<10	0	0	0	2	0	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	7	0	0	0	0	0

45

36

INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	53
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	10
10<20	0	0	0	0	3	7
6<10	3	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	0	0

30

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	24
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	0
20<35	0	0	0	0	14	8
10<20	0	0	5	3	3	5
6<10	0	0	0	0	11	16
3<6	0	0	0	3	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	3	0	0	0	0

37

42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	31
50<80	0	0	0	0	1	2
35<50	0	0	0	0	0	5
20<35	0	1	0	1	7	7
10<20	0	0	1	1	6	17
6<10	0	0	2	2	0	6
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	6	1	0	1	0	0

87

43

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	1	8	26
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	1	0	4	4
10<20	0	0	0	5	14	12
6<10	0	0	0	2	4	0
3<6	0	0	0	0	1	0
1.5<3	0	1	0	0	0	0
0<1.5	9	1	1	4	1	1

139

44

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	2	14
50<80	0	0	0	0	0	2
35<50	0	0	0	0	1	4
20<35	0	0	0	1	2	17
10<20	0	2	0	2	17	13
6<10	0	0	1	1	2	0
3<6	0	2	4	3	0	0
1.5<3	0	2	0	0	0	0
0<1.5	12	0	0	0	0	0

133

45

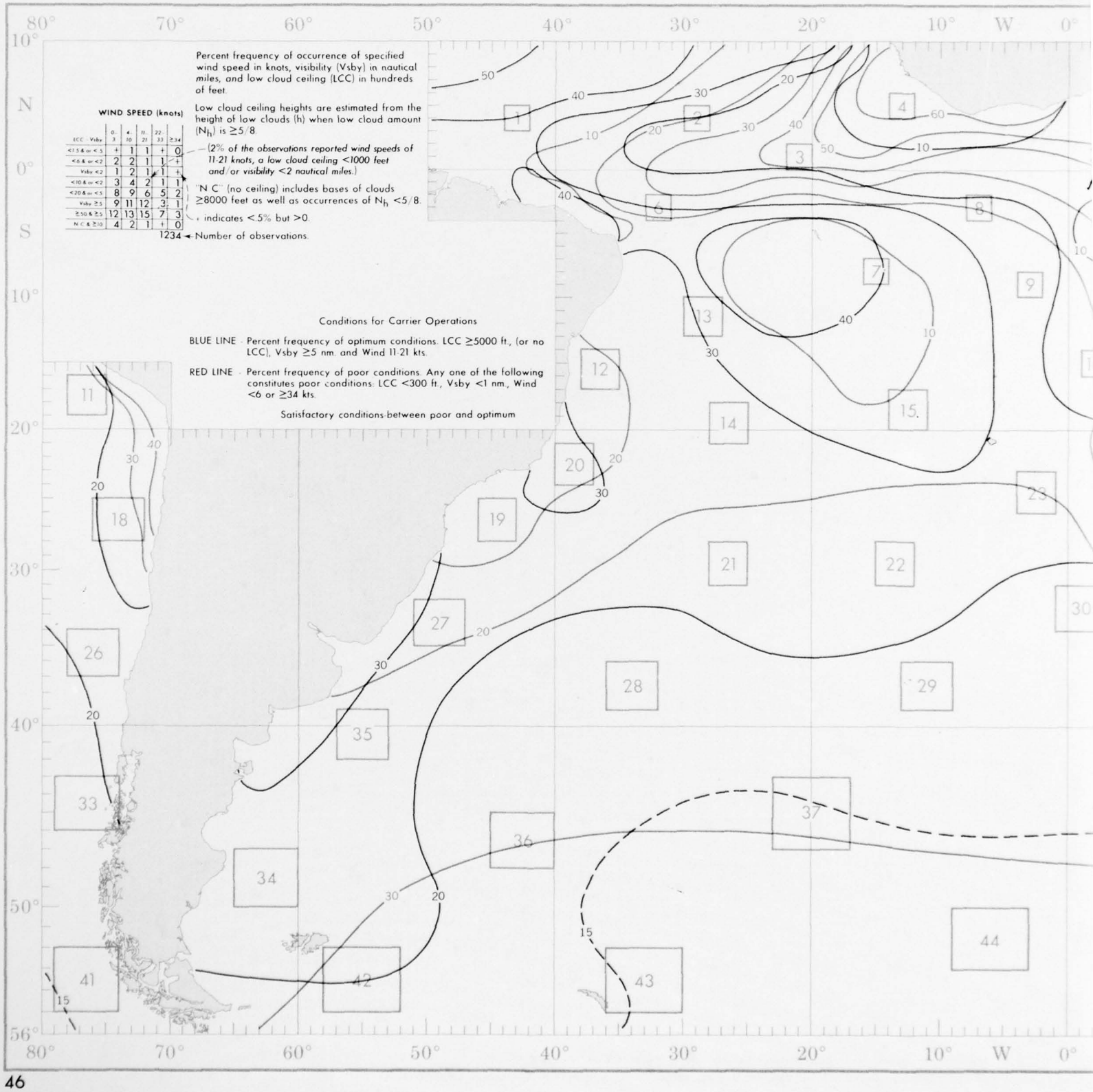
LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	0
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	7	0
10<20	0	0	20	7	7	0
6<10	0	0	7	13	0	0
3<6	0	0	0	7	0	0
1.5<3	0	0	0	0	0	0
0<1.5	20	0	0	7	0	0

15

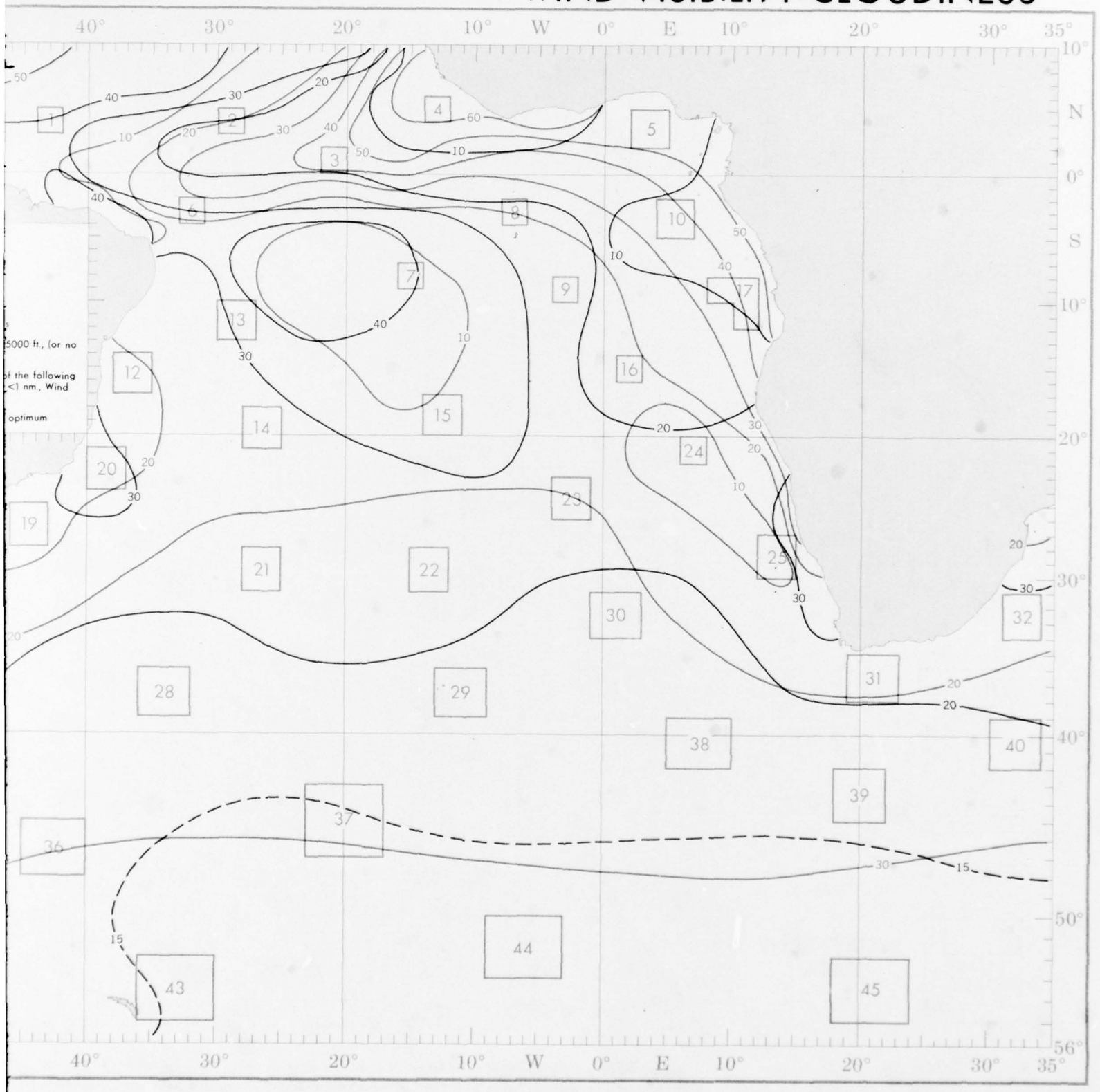
t the objective compilation of available data for specified areas without regard to suspected biases.
Tyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

WIND-



WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	1	4	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	4	11	3	0
<20 & OR <5	1	8	20	5	0
VSBY ≥5	1	23	64	9	0
≥50 & ≥5	+	14	41	3	0
NC & ≥10	+	13	39	3	0

353

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	+	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	8	0	0
<20 & OR <5	2	14	16	+	0
VSBY ≥5	4	48	45	1	0
≥50 & ≥5	2	29	21	1	0
NC & ≥10	2	25	18	1	0

362

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	9	2	0	0
<20 & OR <5	2	12	9	0	0
VSBY ≥5	23	55	20	0	0
≥50 & ≥5	20	42	12	0	0
NC & ≥10	18	38	12	0	0

65

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	+	0	0	0	0
<10 & OR <2	1	3	+	0	0
<20 & OR <5	4	11	2	0	0
VSBY ≥5	31	62	5	0	0
≥50 & ≥5	26	44	3	0	0
NC & ≥10	21	40	3	0	0

929

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	1	0	0
<20 & OR <5	3	13	2	0	0
VSBY ≥5	16	69	15	0	0
≥50 & ≥5	11	49	10	0	0
NC & ≥10	9	43	9	0	0

115

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	0	0	0
<10 & OR <2	1	2	2	0	0
<20 & OR <5	2	6	4	+	0
VSBY ≥5	8	61	29	1	0
≥50 & ≥5	6	51	23	1	0
NC & ≥10	6	49	22	1	0

562

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	3	0	0	0
VSBY <2	0	2	0	0	0
<10 & OR <2	1	7	1	0	0
<20 & OR <5	1	14	5	0	0
VSBY ≥5	13	69	16	0	0
≥50 & ≥5	11	49	9	0	0
NC & ≥10	11	47	8	0	0

192

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	1	0	0	0	0
<10 & OR <2	1	4	4	0	0
<20 & OR <5	2	9	11	0	0
VSBY ≥5	7	42	50	0	0
≥50 & ≥5	5	27	27	0	0
NC & ≥10	5	26	21	0	0

183

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	2	2	0	0
<20 & OR <5	1	5	3	0	0
VSBY ≥5	5	67	26	1	0
≥50 & ≥5	4	60	22	1	0
NC & ≥10	4	58	21	1	0

1390

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	2	0	0	0
VSBY ≥5	5	57	33	5	0
≥50 & ≥5	5	52	28	5	0
NC & ≥10	5	48	27	5	0

60

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	7	0	0
<20 & OR <5	3	5	17	0	0
VSBY ≥5	5	34	58	3	0
≥50 & ≥5	2	28	38	3	0
NC & ≥10	2	28	38	2	0

149

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	+	0
<6 & OR <2	+	1	1	+	+
VSBY <2	+	0	+	0	+
<10 & OR <2	1	2	3	1	+
<20 & OR <5	2	5	7	2	+
VSBY ≥5	8	46	37	6	+
≥50 & ≥5	6	37	27	3	+
NC & ≥10	5	33	25	2	+

460

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	2	0	0
<20 & OR <5	+	5	6	1	0
VSBY ≥5	2	42	44	8	+
≥50 & ≥5	2	33	36	6	+
NC & ≥10	1	31	33	6	+

217

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	2	0	0
VSBY <2	0	0	2	0	0
<10 & OR <2	0	0	4	0	0
<20 & OR <5	0	13	11	4	0
VSBY ≥5	7	54	26	9	0
≥50 & ≥5	7	43	15	4	0
NC & ≥10	7	43	15	4	0

46

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	0	6	0	0
<20 & OR <5	2	4	8	0	0
VSBY ≥5	10	45	37	6	0
≥50 & ≥5	6	37	29	6	0
NC & ≥10	6	37	29	6	0

49

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	1	0
<20 & OR <5	2	8	19	3	0
VSBY ≥5	10	34	52	5	0
≥50 & ≥5	7	24	29	1	0
NC & ≥10	7	23	29	1	0

167

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	8	1	0
<20 & OR <5	+	10	26	3	+
VSBY ≥5	2	30	62	6	+
≥50 & ≥5	1	15	22	2	0
NC & ≥10	1	13	20	1	0

1189

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	3	0	0
<10 & OR <2	0	3	3	0	0
<20 & OR <5	0	21	3	3	0
VSBY ≥5	3	55	33	6	0
≥50 & ≥5	3	30	27	3	0
NC & ≥10	3	24	21	3	0

33

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	11	4	0	0
<20 & OR <5	0	32	21	0	0
VSBY ≥5	0	39	61	0	0
≥50 & ≥5	0	7	32	0	0
NC & ≥10	0	7	21	0	0

28

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	1	11	1	0
<20 & OR <5	4	8	20	1	0
VSBY ≥5	17	36	44	2	0
≥50 & ≥5	12	25	14	1	0
NC & ≥10	11	25	13	1	0

102

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	+	0
VSBY <2	0	0	+	+	0
<10 & OR <2	0	2	4	3	0
<20 & OR <5	+	6	11	8	1
VSBY ≥5	4	31	44	18	1
≥50 & ≥5	3	22	27	8	+
NC & ≥10	3	21	25	8	+

311

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	0	0	+
VSBY <2	0	0	0	0	+
<10 & OR <2	1	2	6	4	+
<20 & OR <5	1	6	15	8	1
VSBY ≥5	4	31	45	16	1
≥50 & ≥5	3	23	25	8	0
NC & ≥10	2	20	23	6	0

239

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	3	2	1
VSBY <2	0	1	0	2	1
<10 & OR <2	8	13	7	5	1
<20 & OR <5	8	16	14	7	2
VSBY ≥5	10	41	24	11	2
≥50 & ≥5	2	14	10	3	1
NC & ≥10	2	13	8	3	1

87

37

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	1	0
<6 & OR <2	1	1	3	4	3
VSBY <2	0	1	3	4	3
<10 & OR <2	1	2	6	6	4
<20 & OR <5	1	4	14	21	7
VSBY ≥5	0	7	18	43	3
≥50 & ≥5	0	1	11	26	1
NC & ≥10	0	1	6	14	0

180

38

INSUFFICIENT DATA

39

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	4	2	0	0
<6 & OR <2	0	4	2	7	0
VSBY <2	0	4	2	5	0
<10 & OR <2	0	4	15	13	0
<20 & OR <5	0	5	27	29	4
VSBY ≥5	0	15	33	24	4
≥50 & ≥5	0	7	7	4	0
NC & ≥10	0	5	4	2	0

55

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	3	0
<6 & OR <2	0	3	0	3	0
VSBY <2	0	3	0	3	0
<10 & OR <2	0	3	3	3	0
<20 & OR <5	0	7	10	3	0
VSBY ≥5	7	48	31	3	3
≥50 & ≥5	7	38	21	0	3
NC & ≥10	7	31	14	0	3

29

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	0	0
<6 & OR <2	0	0	3	8	0
VSBY <2	0	0	3	5	0
<10 & OR <2	0	5	19	14	0
<20 & OR <5	0	5	27	16	0
VSBY ≥5	0	14	51	22	0
≥50 & ≥5	0	8	8	14	0
NC & ≥10	0	5	8	11	0

37

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	6	2	0
<6 & OR <2	0	2	8	3	0
VSBY <2	0	1	7	3	0
<10 & OR <2	0	2	13	6	0
<20 & OR <5	2	5	26	14	0
VSBY ≥5	3	10	45	24	0
≥50 & ≥5	1	6	20	8	0
NC & ≥10	1	5	17	8	0

86

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	+	0	0	0	0
<10 & OR <2	1	3	+	0	0
<20 & OR <5	4	11	2	0	0
VSBY ≥5	31	62	5	0	0
≥50 & ≥5	26	44	3	0	0
NC & ≥ 10	21	40	3	0	0

929

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	1	0	0
<20 & OR <5	3	13	2	0	0
VSBY ≥5	16	69	15	0	0
≥50 & ≥5	11	49	10	0	0
NC & ≥ 10	9	43	9	0	0

115

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	0	0	0
<10 & OR <2	1	2	2	0	0
<20 & OR <5	2	6	4	+	0
VSBY ≥5	8	61	29	1	0
≥50 & ≥5	6	51	23	1	0
NC & ≥ 10	6	49	22	1	0

562

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	0	0
<20 & OR <5	0	7	7	0	0
VSBY ≥5	2	50	48	0	0
≥50 & ≥5	2	41	40	0	0
NC & ≥ 10	1	41	35	0	0

92

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	2	1	+	0
<20 & OR <5	1	8	5	+	0
VSBY ≥5	4	66	30	+	0
≥50 & ≥5	3	53	23	0	0
NC & ≥ 10	3	52	23	0	0

1075

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	+	7	5	0	0
VSBY ≥5	4	64	31	+	0
≥50 & ≥5	4	52	22	0	0
NC & ≥ 10	4	51	22	0	0

947

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	2	0	0	0
VSBY ≥5	5	57	33	5	0
≥50 & ≥5	5	52	28	5	0
NC & ≥ 10	5	48	27	5	0

60

INSUFFICIENT DATA

14

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	7	0	0
<20 & OR <5	3	5	17	0	0
VSBY ≥5	5	34	58	3	0
≥50 & ≥5	2	28	38	3	0
NC & ≥ 10	2	28	38	2	0

149

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	5	+	0
<20 & OR <5	+	17	15	+	0
VSBY ≥5	2	56	42	1	0
≥50 & ≥5	1	29	17	+	0
NC & ≥ 10	1	27	16	+	0

1107

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	2	8	1	0	0
VSBY ≥5	19	68	12	0	0
≥50 & ≥5	16	54	9	0	0
NC & ≥ 10	15	52	9	0	0

164

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	6	0	0
<20 & OR <5	3	19	23	0	0
VSBY ≥5	10	41	48	1	0
≥50 & ≥5	5	10	7	1	0
NC & ≥ 10	5	10	5	1	0

145

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	0	6	0	0
<20 & OR <5	2	4	8	0	0
VSBY ≥5	10	45	37	6	0
≥50 & ≥5	6	37	29	6	0
NC & ≥ 10	6	37	29	6	0

49

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	1	0
<20 & OR <5	2	8	19	3	0
VSBY ≥5	10	34	52	5	0
≥50 & ≥5	7	24	29	1	0
NC & ≥ 10	7	23	29	1	0

167

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	8	1	0
<20 & OR <5	+	10	26	3	+
VSBY ≥5	2	30	62	6	+
≥50 & ≥5	1	15	22	2	0
NC & ≥ 10	1	13	20	1	0

1189

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	+	1	+	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	1	5	2	+
<20 & OR <5	1	5	18	9	1
VSBY ≥5	2	20	52	23	2
≥50 & ≥5	1	12	27	11	+
NC & ≥ 10	1	11	24	9	+

1935

26

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	7
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	7
<20 & OR <5	0	0	7	0	7
VSBY ≥5	0	20	53	20	7
≥50 & ≥5	0	20	47	13	0
NC & ≥ 10	0	13	33	7	0

15

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	+	1	+	0
VSBY <2	0	0	+	+	0
<10 & OR <2	1	2	4	1	0
<20 & OR <5	2	4	10	2	0
VSBY ≥5	5	39	44	8	+
≥50 & ≥5	4	31	31	6	+
NC & ≥ 10	4	28	28	5	+

251

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	+	0
VSBY <2	0	0	+	+	0
<10 & OR <2	0	2	4	3	0
<20 & OR <5	+	6	11	8	1
VSBY ≥5	4	31	44	18	1
≥50 & ≥5	3	22	27	8	+
NC & ≥ 10	3	21	25	8	+

311

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	0	0	+
VSBY <2	0	0	0	0	+
<10 & OR <2	1	2	6	4	+
<20 & OR <5	1	6	15	8	1
VSBY ≥5	4	31	45	16	1
≥50 & ≥5	3	23	25	8	0
NC & ≥ 10	2	20	23	6	0

239

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	3	2	1
VSBY <2	0	1	0	2	1
<10 & OR <2	8	13	7	5	1
<20 & OR <5	8	16	14	7	2
VSBY ≥5	10	41	24	11	2
≥50 & ≥5	2	14	10	3	1
NC & ≥ 10	2	13	8	3	1

87

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	0	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	5	0	0
<20 & OR <5	0	2	16	3	0
VSBY ≥5	5	25	46	20	0
≥50 & ≥5	5	20	26	15	0
NC & ≥ 10	5	18	21	11	0

61

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	4	2	0	0
<6 & OR <2	0	4	2	0	0
VSBY <2	0	4	2	0	0
<10 & OR <2	0	11	2	0	0
<20 & OR <5	0	18	4	0	2
VSBY ≥5	4	38	31	13	2
≥50 & ≥5	4	27	27	13	0
NC & ≥ 10	4	22	20	11	0

45

36

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	3	0
<6 & OR <2	0	3	0	3	0
VSBY <2	0	3	0	3	0
<10 & OR <2	0	3	3	3	0
<20 & OR <5	0	7	10	3	0
VSBY ≥5	7	48	31	3	3
≥50 & ≥5	7	38	21	0	3
NC & ≥ 10	7	31	14	0	3

29

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	0	0
<6 & OR <2	0	0	3	8	0
VSBY <2	0	0	3	5	0
<10 & OR <2	0	5	19	14	0
<20 & OR <5	0	5	27	16	0
VSBY ≥5	0	14	51	22	0
≥50 & ≥5	0	8	8	14	0
NC & ≥ 10	0	5	8	11	0

37

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	6	2	0
<6 & OR <2	0	2	8	3	0
VSBY <2	0	1	7	3	0
<10 & OR <2	0	2	13	6	0
<20 & OR <5	2	5	26	14	0
VSBY ≥5	3	10	45	24	0
≥50 & ≥5	1	6	20	8	0
NC & ≥ 10	1	5	17	8	0

86

43

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	3	8	3	4	0
<6 & OR <2	3	9	5	4	0
VSBY <2	2	4	4	3	0
<10 & OR <2	3	10	8	5	0
<20 & OR <5	4	24	16	11	4
VSBY ≥5	2	25	30	13	5
≥50 & ≥5	0	8	18	6	1
NC & ≥ 10	0	6	14	5	1

139

44

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	7	5	1	0
<6 & OR <2	1	8	9	8	0
VSBY <2	1	8	9	5	0
<10 & OR <2	1	8	9	10	0
<20 & OR <5	1	8	29	23	0
VSBY ≥5	2	6	42	21	0
≥50 & ≥5	1	3	11	1	0
NC & ≥ 10	1	2	9	1	0

132

45

WIND SPEED (KNOTS)

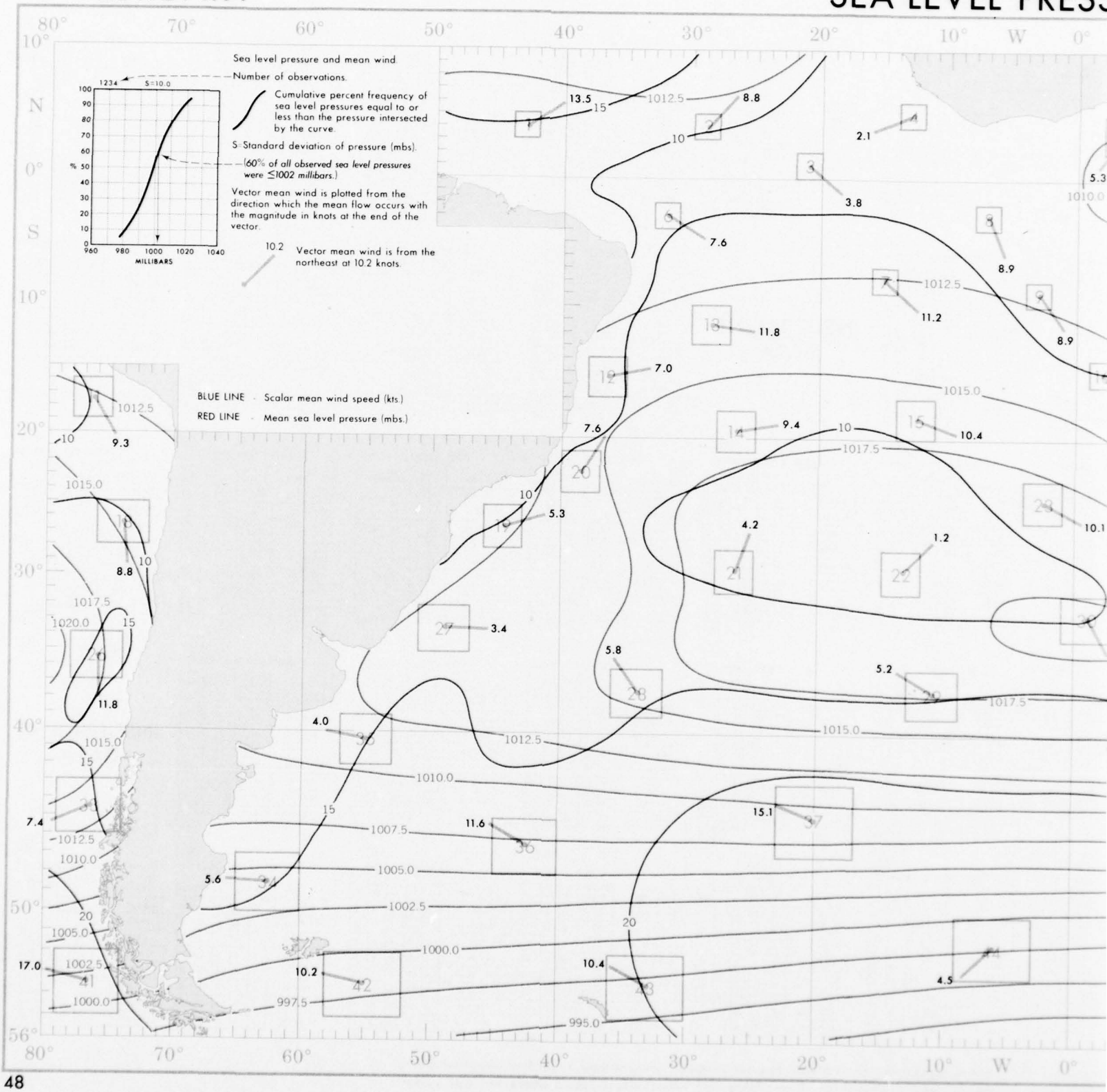
LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	7	13	7	0
<6 & OR <2	0	7	20	33	0
VSBY <2	0	7	20	20	0
<10 & OR <2	0	13	27	33	0
<20 & OR <5	0	13	27	40	7
VSBY ≥5	0	7	7	7	0
≥50 & ≥5	0	7	0	0	0
NC & ≥ 10	0	0	0	0	0

15

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

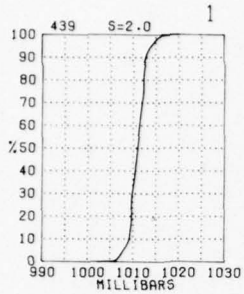
SEA LEVEL PRESS

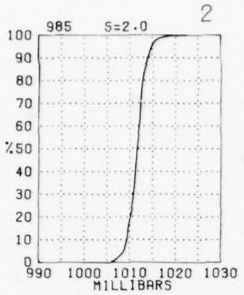


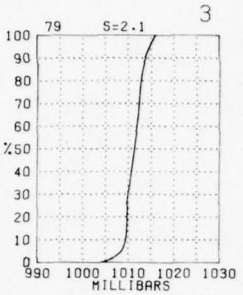
SEA LEVEL PRESSURE AND MEAN WIND

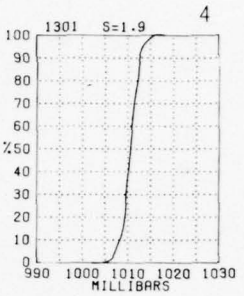


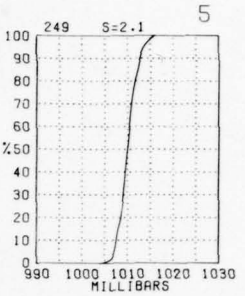
SEA LEVEL PRESSURE

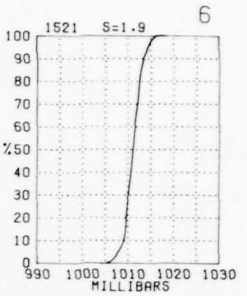


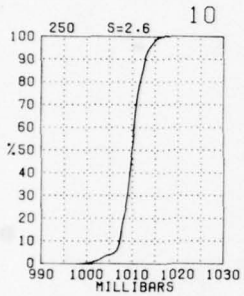


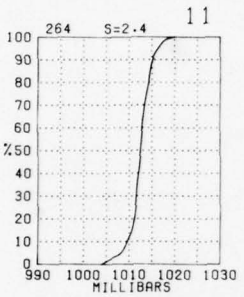


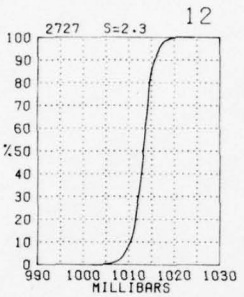


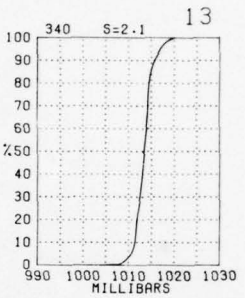


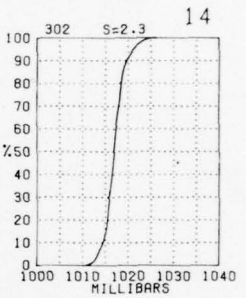


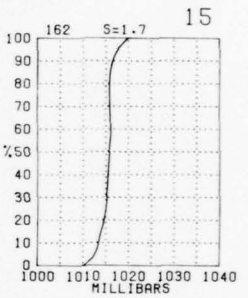


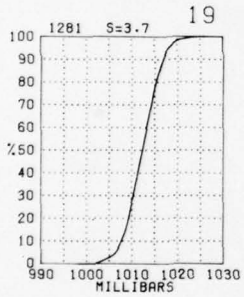


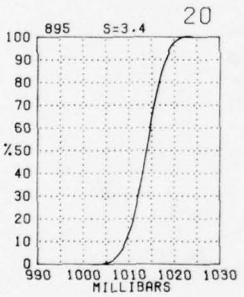


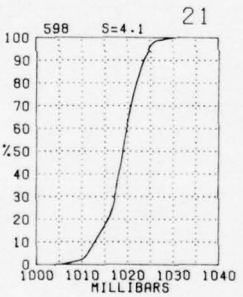


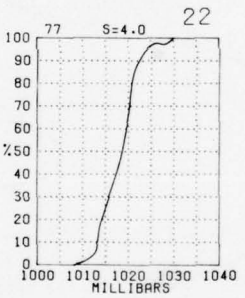


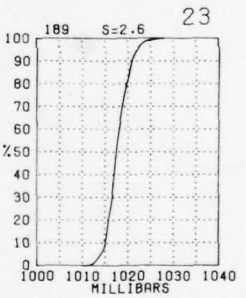


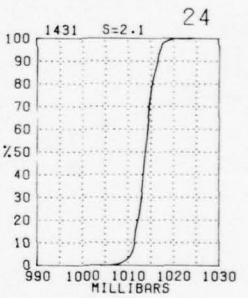


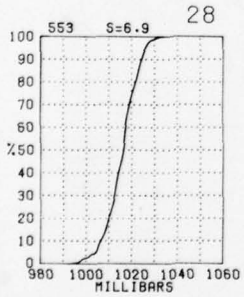


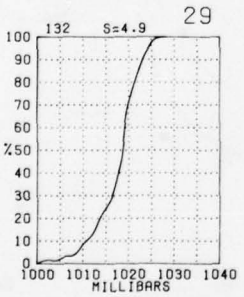


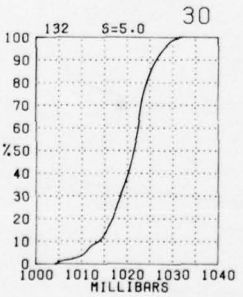


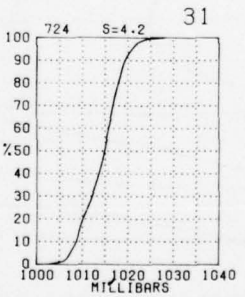


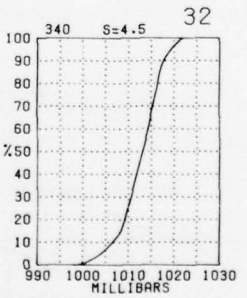


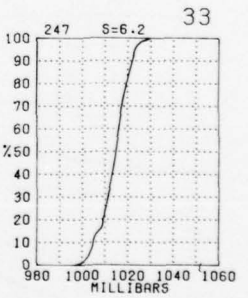


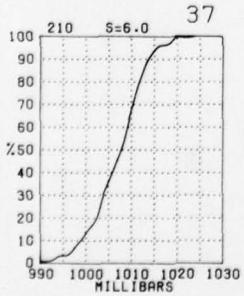


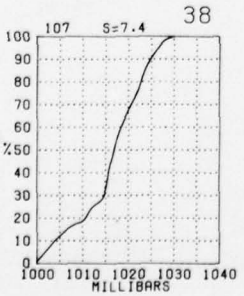


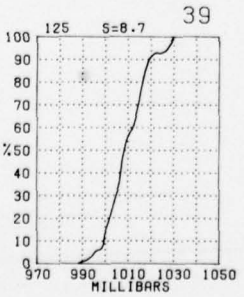


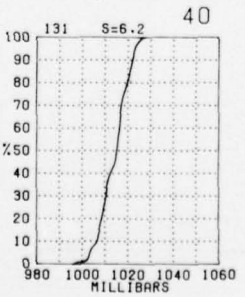


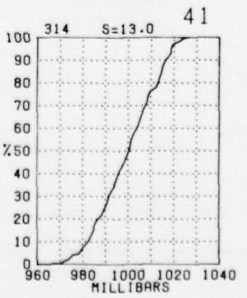


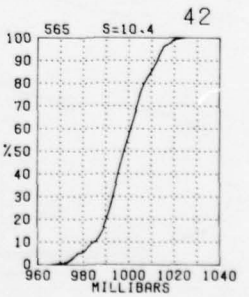






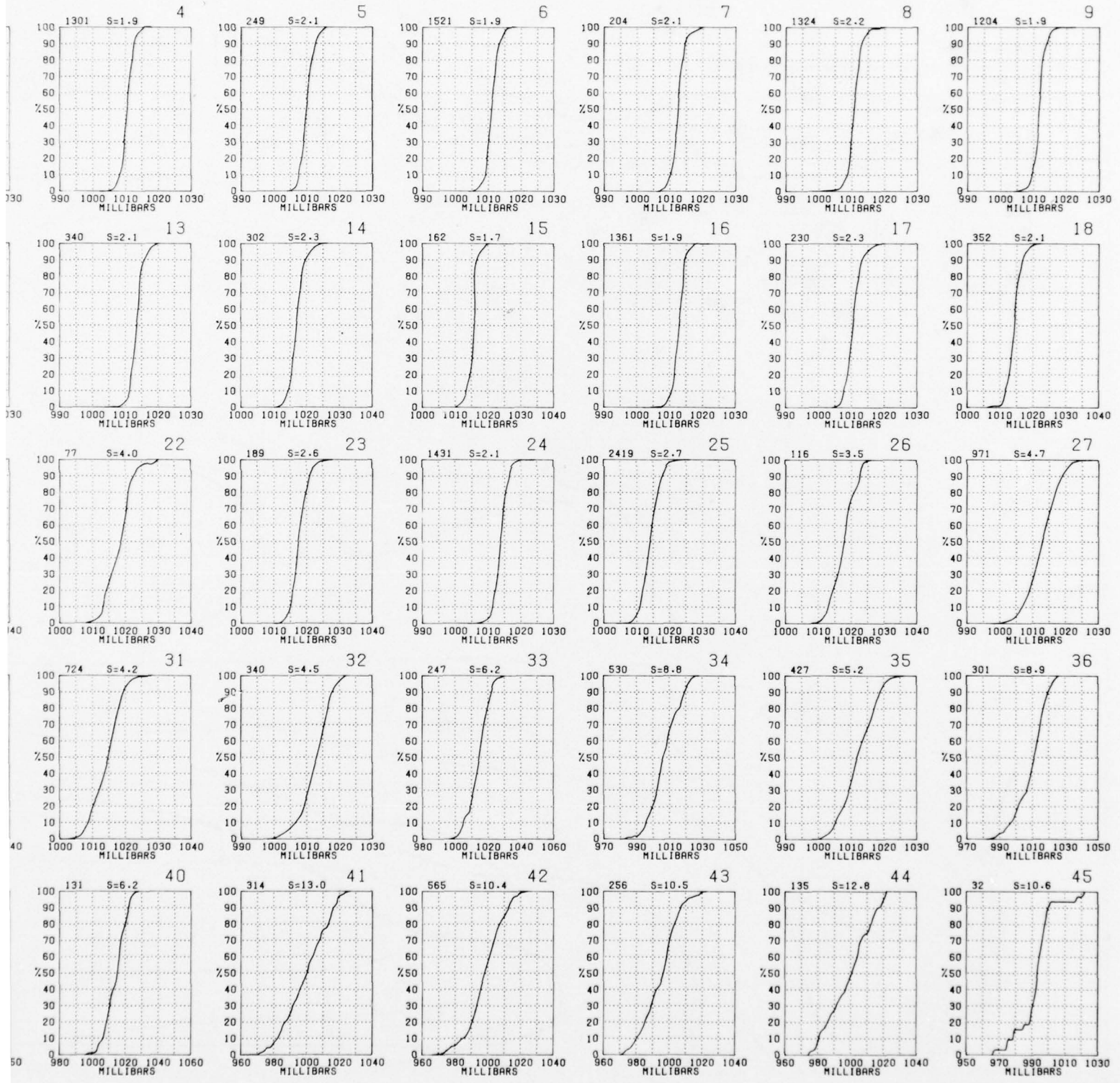






Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

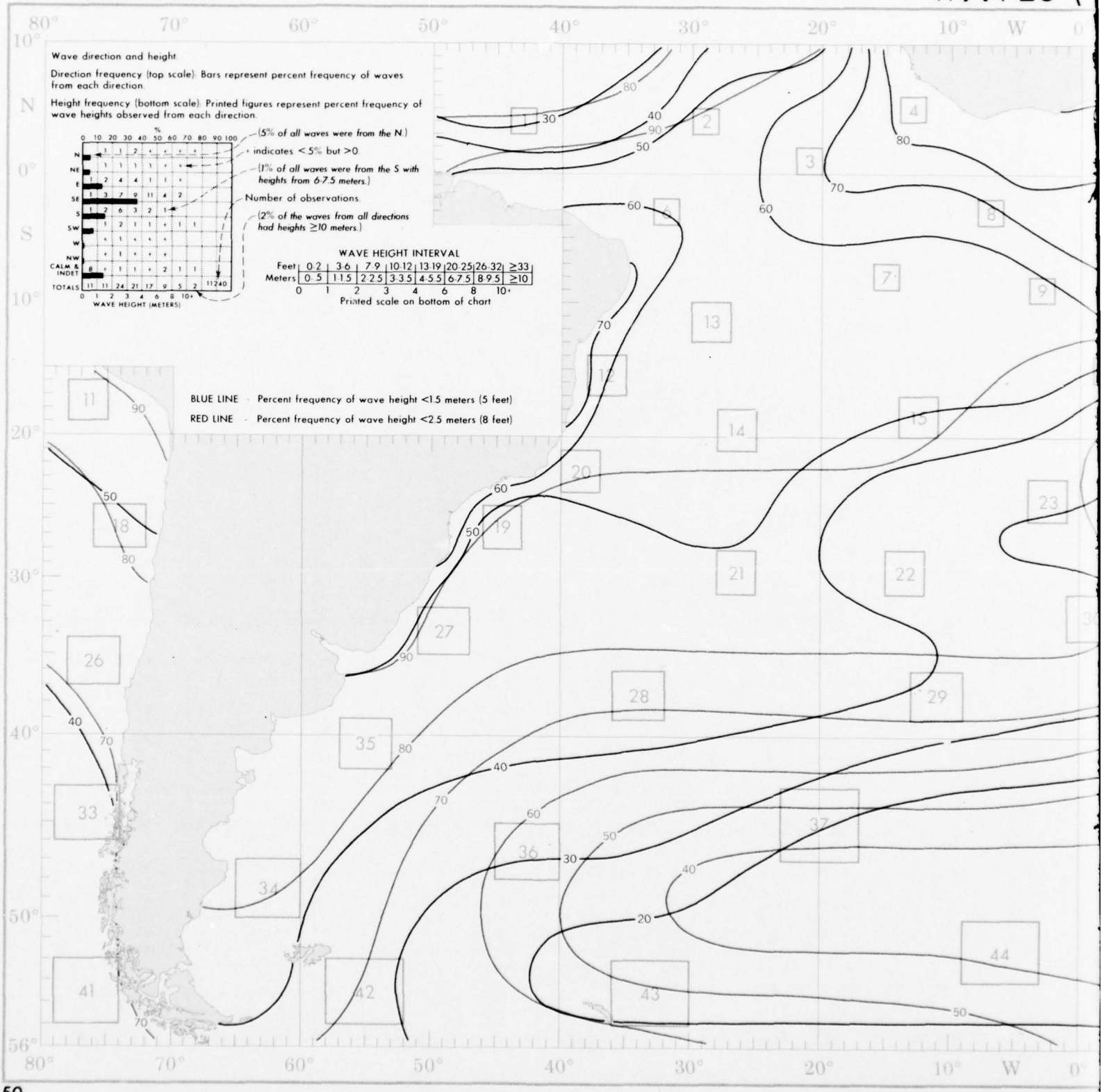
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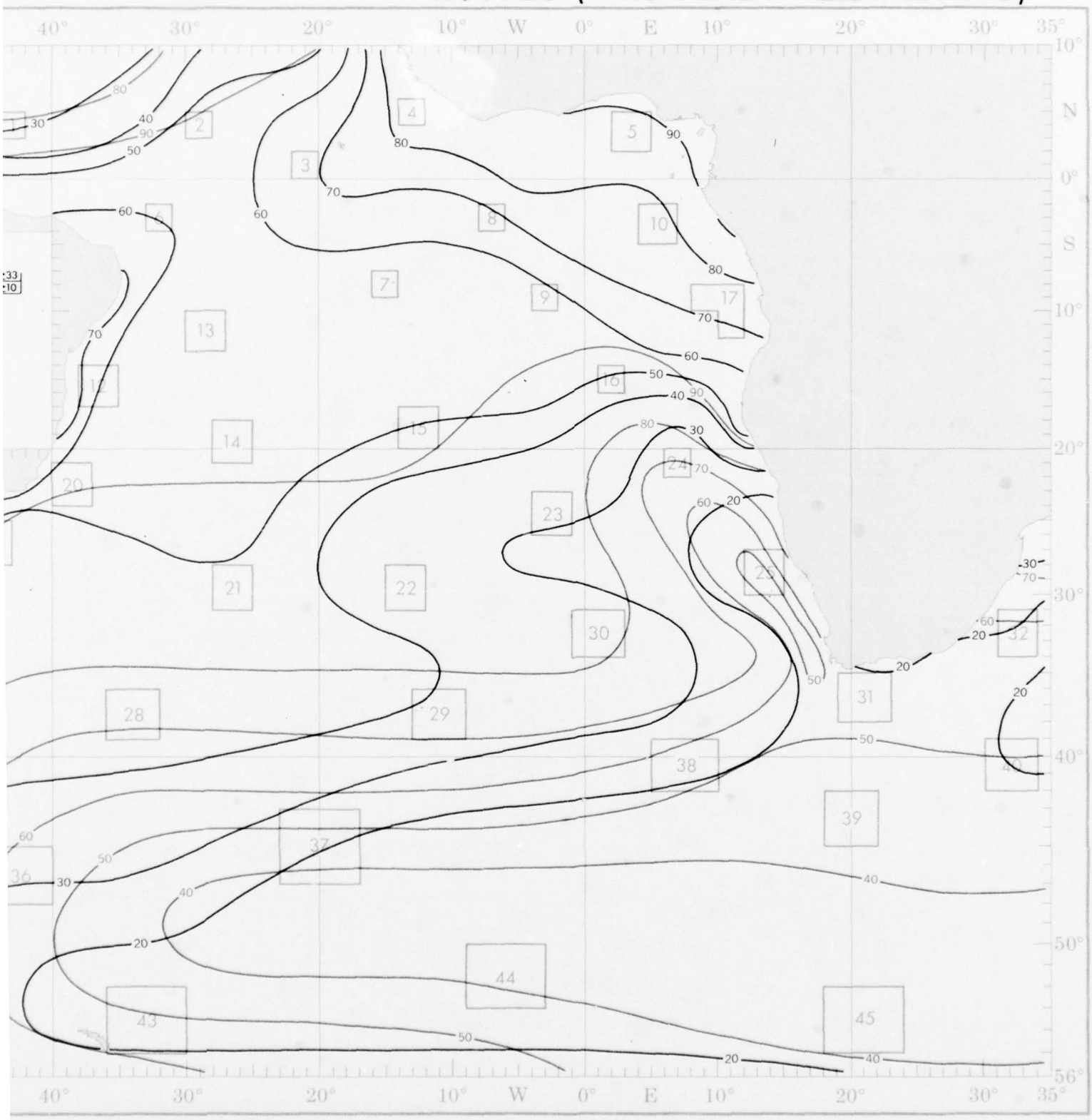
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lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

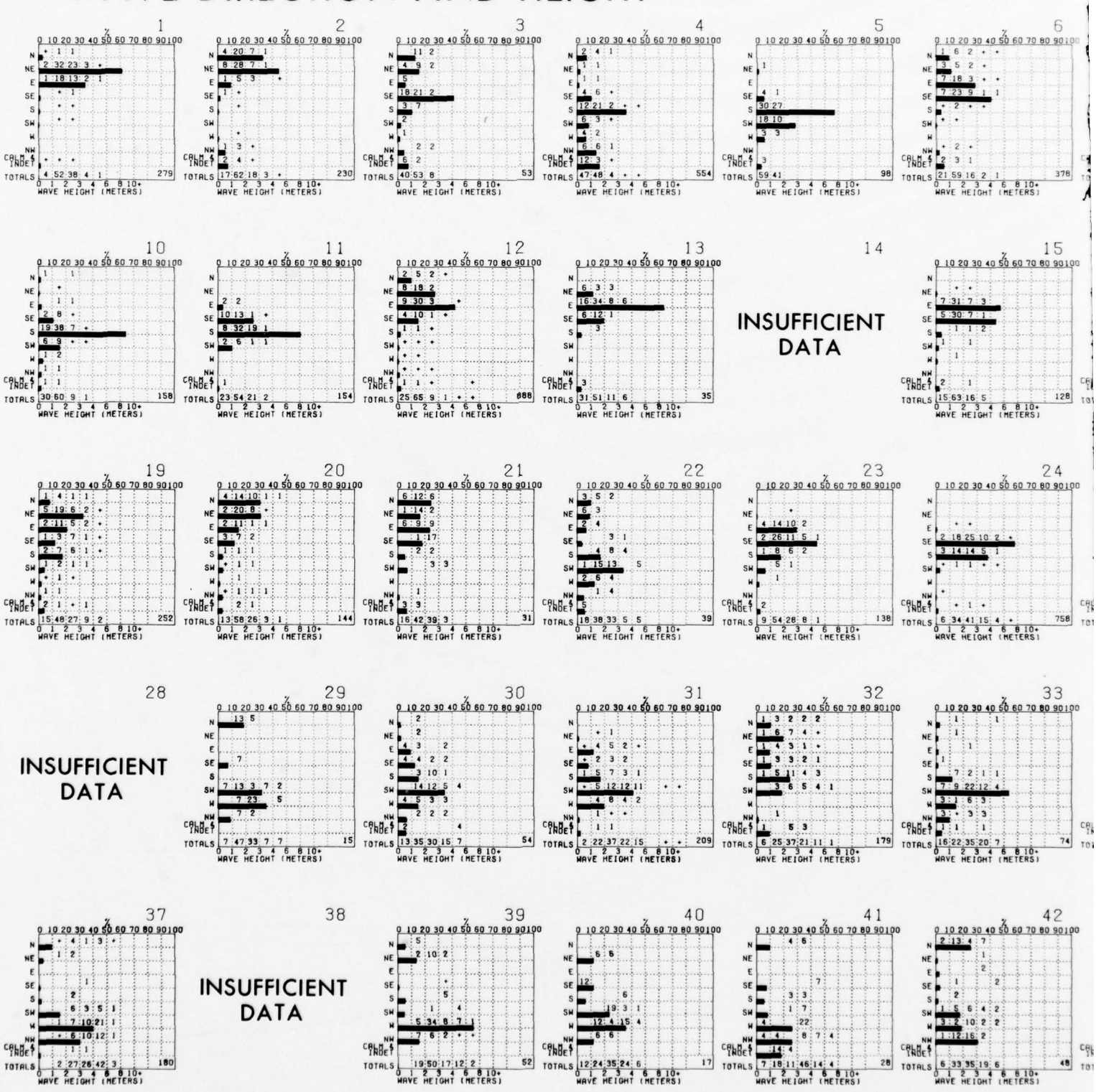
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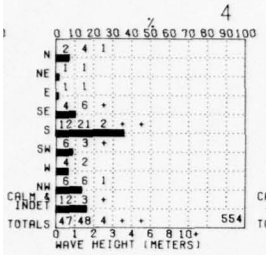
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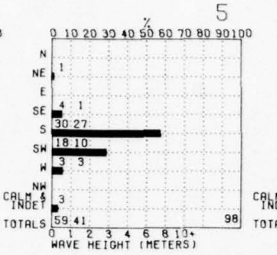


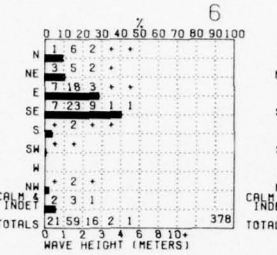
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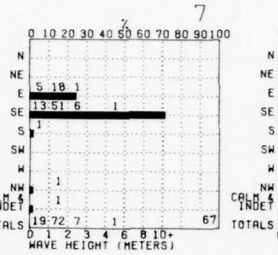


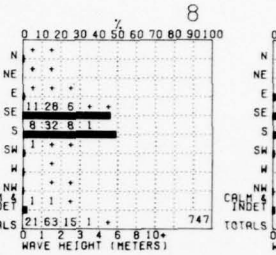
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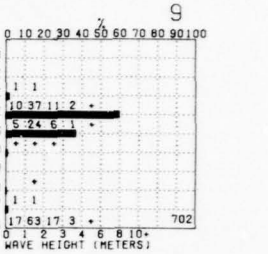


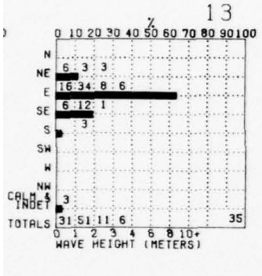






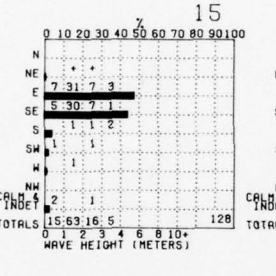


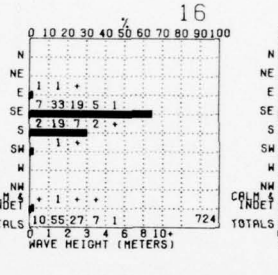


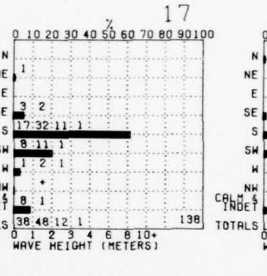


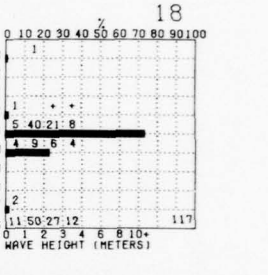
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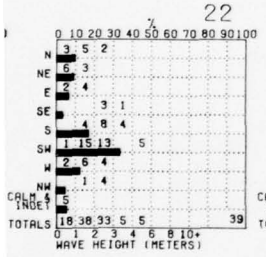
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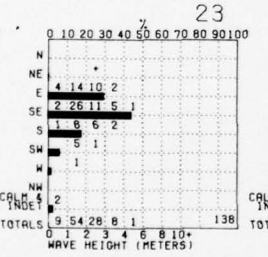


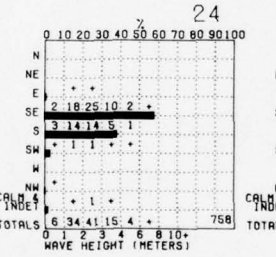


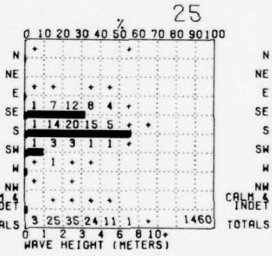


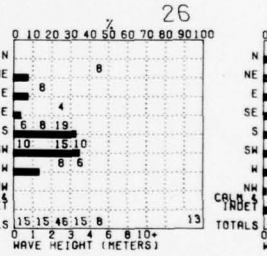


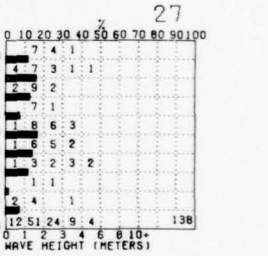


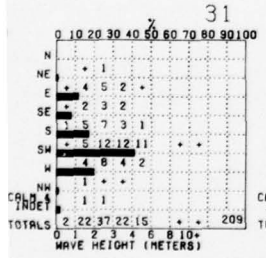


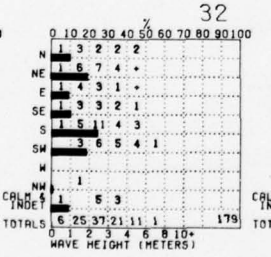


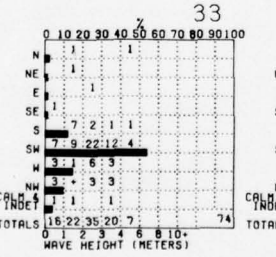


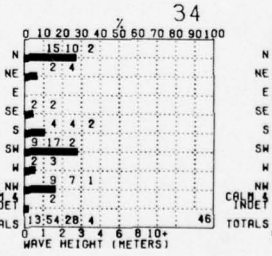


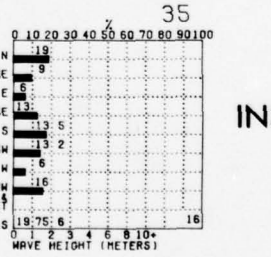






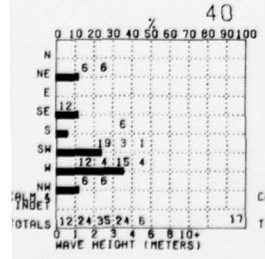


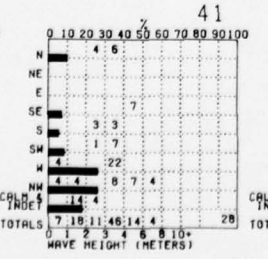


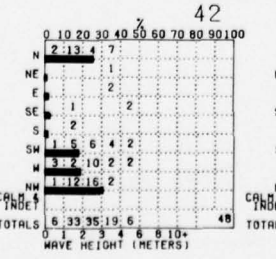


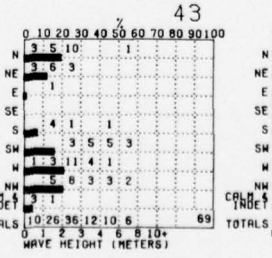
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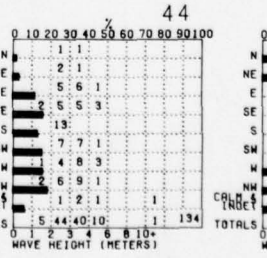
INSUFFICIENT DATA

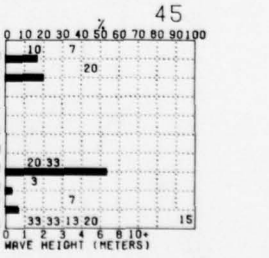












he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

FEBRUARY

WAVES (≥

PERIOD (Seconds)

HEIGHT (METERS)	≤6	6-7	8-9	10-11	12-13	>13	CALM
0-1	21	3	1	+	+	+	6
1-1.5	22	16	6	2	+	+	+
2-2.5	3	6	4	3	1	+	+
3-3.5	+	1	1	1	1	+	+
4-5.5	+	+	+	+	+	+	0
6-7.5	0	+	+	0	0	+	0
8-9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	+	0

4010

Percent frequency of occurrence of wave period and height.

(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)

+ indicates < 5% but >0.

Number of observations.

Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.

BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)

RED LINE - Percent frequency of wave height ≥6 meters (20 feet)

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	2	0	0	0	0	+
1-1.5	23	23	2	1	1	0	1
2-2.5	6	11	17	2	0	1	1
3-3.5	+	1	2	1	0	0	0
4-5.5	+	+	0	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

283

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	+	1	+	0	0	6
1-1.5	19	18	9	2	3	+	9
2-2.5	1	5	7	+	2	2	+
3-3.5	1	1	+	+	0	0	0
4-5.5	0	0	0	0	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

235

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	32	3	3	2	0	0	5
1-1.5	27	10	7	2	0	0	2
2-2.5	0	3	3	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

59

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	26	4	1	1	0	0	18
1-1.5	18	15	3	2	2	+	5
2-2.5	1	1	1	+	+	0	+
3-3.5	0	0	0	+	0	0	0
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

593

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	7	3	1	0	0	27
1-1.5	13	9	13	1	2	0	1
2-2.5	0	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

104

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	2	0	1	0	0	6
1-1.5	22	19	4	3	2	+	9
2-2.5	2	6	3	1	2	1	2
3-3.5	1	1	+	1	0	0	0
4-5.5	0	0	1	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

385

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	21	4	1	1	0	0	7
1-1.5	19	14	6	4	7	0	7
2-2.5	2	4	2	1	0	0	1
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

168

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	3	1	2	0	0	3
1-1.5	19	18	7	4	2	0	3
2-2.5	2	6	9	2	1	1	0
3-3.5	0	0	1	1	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

157

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	2	+	1	0	0	5
1-1.5	28	21	4	1	3	+	5
2-2.5	1	4	2	+	+	+	+
3-3.5	+	1	0	0	0	0	0
4-5.5	+	0	0	0	0	0	0
6-7.5	0	+	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

920

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	29	0	0	0	0	0	3
1-1.5	26	11	0	3	3	3	6
2-2.5	9	0	0	0	0	3	0
3-3.5	0	6	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

35

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	2	0	0	2
1-1.5	36	21	2	0	1	0	2
2-2.5	4	6	4	2	0	0	1
3-3.5	2	1	2	2	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

132

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	+	0	0	0	0	7
1-1.5	19	13	9	1	1	0	3
2-2.5	5	8	5	2	2	0	5
3-3.5	+	1	2	3	2	0	1
4-5.5	0	0	0	0	+	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

260

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	0	0	0	0	0	5
1-1.5	23	25	3	1	1	1	5
2-2.5	4	11	3	2	1	0	5
3-3.5	0	1	1	0	0	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

150

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	0	0	0	3
1-1.5	10	19	10	0	0	0	3
2-2.5	0	16	10	6	0	0	6
3-3.5	0	0	0	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	0	3	0	0	0	8
1-1.5	5	23	5	0	5	0	0
2-2.5	5	13	5	8	3	0	0
3-3.5	0	3	0	3	0	0	0
4-5.5	0	0	0	5	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

39

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	0	0	0	0	3
1-1.5	19	23	6	2	1	1	1
2-2.5	3	15	7	2	0	0	0
3-3.5	0	1	4	1	0	2	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

143

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	+	0	0	1
1-1.5	14	10	4	1	1	+	4
2-2.5	8	14	10	3	1	1	4
3-3.5	1	5	6	2	+	+	1
4-5.5	+	1	2	+	+	+	0
6-7.5	0	+	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

763

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	0
1-1.5	27	13	7	0	0	0	0
2-2.5	0	0	0	0	0	13	20
3-3.5	0	0	0	7	0	0	0
4-5.5	0	0	0	0	7	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	0	0	0	4
1-1.5	9	11	11	0	4	0	0
2-2.5	2	5	9	9	4	0	0
3-3.5	2	5	4	4	0	0	0
4-5.5	0	0	5	0	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

56

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	1
1-1.5	7	8	3	2	0	0	2
2-2.5	5	8	14	5	1	+	3
3-3.5	2	4	9	2	3	1	1
4-5.5	0	1	8	4	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	+	0	0	0

212

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	1
1-1.5	9	6	5	1	1	0	3
2-2.5	6	12	8	5	2	0	4
3-3.5	2	7	3	1	1	1	8
4-5.5	1	2	6	1	1	0	1
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

180

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	5	0	0	0	0	4
1-1.5	11	8	1	0	0	0	1
2-2.5	1	8	11	7	0	1	7
3-3.5	4	3	9	1	0	1	1
4-5.5	3	1	0	1	0	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

76

37

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	1	1	0	0	0	0
2-2.5	0	2	15	9	1	0	0
3-3.5	0	1	11	12	2	0	1
4-5.5	0	2	9	23	7	1	0
6-7.5	0	0	1	1	2	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

180

38

INSUFFICIENT DATA

39

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	2	17	0	0	0	0	0
2-2.5	0	13	19	6	10	0	2
3-3.5	0	2	12	2	0	0	2
4-5.5	0	2	4	0	4	0	2
6-7.5	0	0	2	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

52

40

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	12
1-1.5	18	6	0	0	0	0	0
2-2.5	6	0	0	0	12	0	18
3-3.5	12	6	6	0	0	0	0
4-5.5	0	0	6	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	0
1-1.5	0	4	0	0	0	0	14
2-2.5	4	4	0	0	0	0	4
3-3.5	21	4	18	0	0	0	4
4-5.5	0	0	7	0	0	7	0
6-7.5	0	0	0	4	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

28

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	6
1-1.5	10	4	17	0	0	0	2
2-2.5	6	8	19	0	0	0	2
3-3.5	0	2	15	2	0	0	0
4-5.5	0	2	2	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

48

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

4

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	26	4	1	1	0	0	18
1-1.5	18	15	3	2	2	+	5
2-2.5	1	1	1	+	+	0	+
3-3.5	0	0	0	+	0	0	0
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

593

5

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	7	3	1	0	0	27
1-1.5	13	9	13	1	2	0	1
2-2.5	0	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

104

6

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	2	0	1	0	0	6
1-1.5	22	19	4	3	2	+	9
2-2.5	2	6	3	1	2	1	2
3-3.5	1	1	+	1	0	0	0
4-5.5	0	0	1	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

385

7

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	0	0	0	0	0	0
1-1.5	31	17	8	0	4	3	4
2-2.5	3	0	1	1	0	1	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

71

8

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	1	1	1	0	0	5
1-1.5	26	17	7	3	2	1	6
2-2.5	4	6	2	+	1	+	1
3-3.5	1	+	+	+	0	0	0
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

764

9

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	+	+	0	0	3
1-1.5	24	19	7	2	3	1	6
2-2.5	4	6	3	2	0	1	1
3-3.5	+	2	+	1	0	0	0
4-5.5	0	+	0	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

710

13

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	29	0	0	0	0	0	3
1-1.5	26	11	0	3	3	3	6
2-2.5	9	0	0	0	0	3	0
3-3.5	0	6	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

35

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	2	0	0	2
1-1.5	36	21	2	0	1	0	2
2-2.5	4	6	4	2	0	0	1
3-3.5	2	1	2	2	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

132

16

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	+	0	0	0	2
1-1.5	19	15	8	2	3	+	7
2-2.5	5	10	6	2	1	+	1
3-3.5	1	2	2	1	+	+	0
4-5.5	+	+	+	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

727

17

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	3	1	1	0	0	11
1-1.5	17	10	12	1	1	0	3
2-2.5	1	5	3	1	0	1	1
3-3.5	0	0	1	0	0	1	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

18

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	3	4	1	0	0	2
1-1.5	22	12	8	2	1	0	2
2-2.5	2	5	13	3	2	1	0
3-3.5	0	0	7	2	0	1	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

122

22

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	0	3	0	0	0	8
1-1.5	5	23	5	0	5	0	0
2-2.5	5	13	5	8	3	0	0
3-3.5	0	3	0	3	0	0	0
4-5.5	0	0	0	5	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

39

23

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	0	0	0	0	3
1-1.5	19	23	6	2	1	1	1
2-2.5	3	15	7	2	0	0	0
3-3.5	0	1	4	1	0	2	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

143

24

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	+	0	0	1
1-1.5	14	10	4	1	1	+	4
2-2.5	8	14	10	3	1	1	4
3-3.5	1	5	6	2	+	+	1
4-5.5	+	1	2	+	+	+	0
6-7.5	0	+	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

763

25

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	0	+	0	0	1
1-1.5	9	7	4	1	1	+	4
2-2.5	6	12	9	3	1	+	3
3-3.5	2	8	7	3	1	1	2
4-5.5	1	3	4	1	1	+	1
6-7.5	0	+	+	0	+	0	0
8-9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	0	0

1466

26

INSUFFICIENT DATA

27

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	5
1-1.5	18	16	8	0	1	0	6
2-2.5	3	5	6	3	2	0	4
3-3.5	1	3	4	0	1	1	1
4-5.5	0	3	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

141

31

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	1
1-1.5	7	8	3	2	0	0	2
2-2.5	5	8	14	5	1	+	3
3-3.5	2	4	9	2	3	1	1
4-5.5	0	1	8	4	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	+	0	0	0

212

32

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	1
1-1.5	9	6	5	1	1	0	3
2-2.5	6	12	8	5	2	0	4
3-3.5	2	7	3	1	1	1	8
4-5.5	1	2	6	1	1	0	1
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

180

33

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	5	0	0	0	0	4
1-1.5	11	8	1	0	0	0	1
2-2.5	1	8	11	7	0	1	7
3-3.5	4	3	9	1	0	1	1
4-5.5	3	1	0	1	0	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

76

34

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	2	0	0	2
1-1.5	26	15	2	2	4	0	4
2-2.5	7	11	2	2	0	0	7
3-3.5	0	2	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

46

35

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	0	0	0	0	0	0
1-1.5	44	13	19	0	0	0	0
2-2.5	0	0	6	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

16

36

INSUFFICIENT DATA

40

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	12
1-1.5	18	6	0	0	0	0	0
2-2.5	6	0	0	0	12	0	18
3-3.5	12	6	6	0	0	0	0
4-5.5	0	0	6	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

41

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	0
1-1.5	0	4	0	0	0	0	14
2-2.5	4	4	0	0	0	0	4
3-3.5	21	4	18	0	0	0	4
4-5.5	0	0	7	0	0	7	0
6-7.5	0	0	0	4	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

28

42

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	6
1-1.5	10	4	17	0	0	0	2
2-2.5	6	8	19	0	0	0	2
3-3.5	0	2	15	2	0	0	0
4-5.5	0	2	2	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

48

43

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	9
1-1.5	17	3	0	0	1	0	4
2-2.5	4	13	4	0	0	0	14
3-3.5	0	3	1	0	0	0	7
4-5.5	0	1	0	1	0	0	7
6-7.5	0	0	0	0	0	0	6
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

70

44

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	1	1	0	1	3	0	0
2-2.5	0	4	0	6	27	4	3
3-3.5	0	0	0	1	16	20	2
4-5.5	0	0	0	1	2	6	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	1	0

134

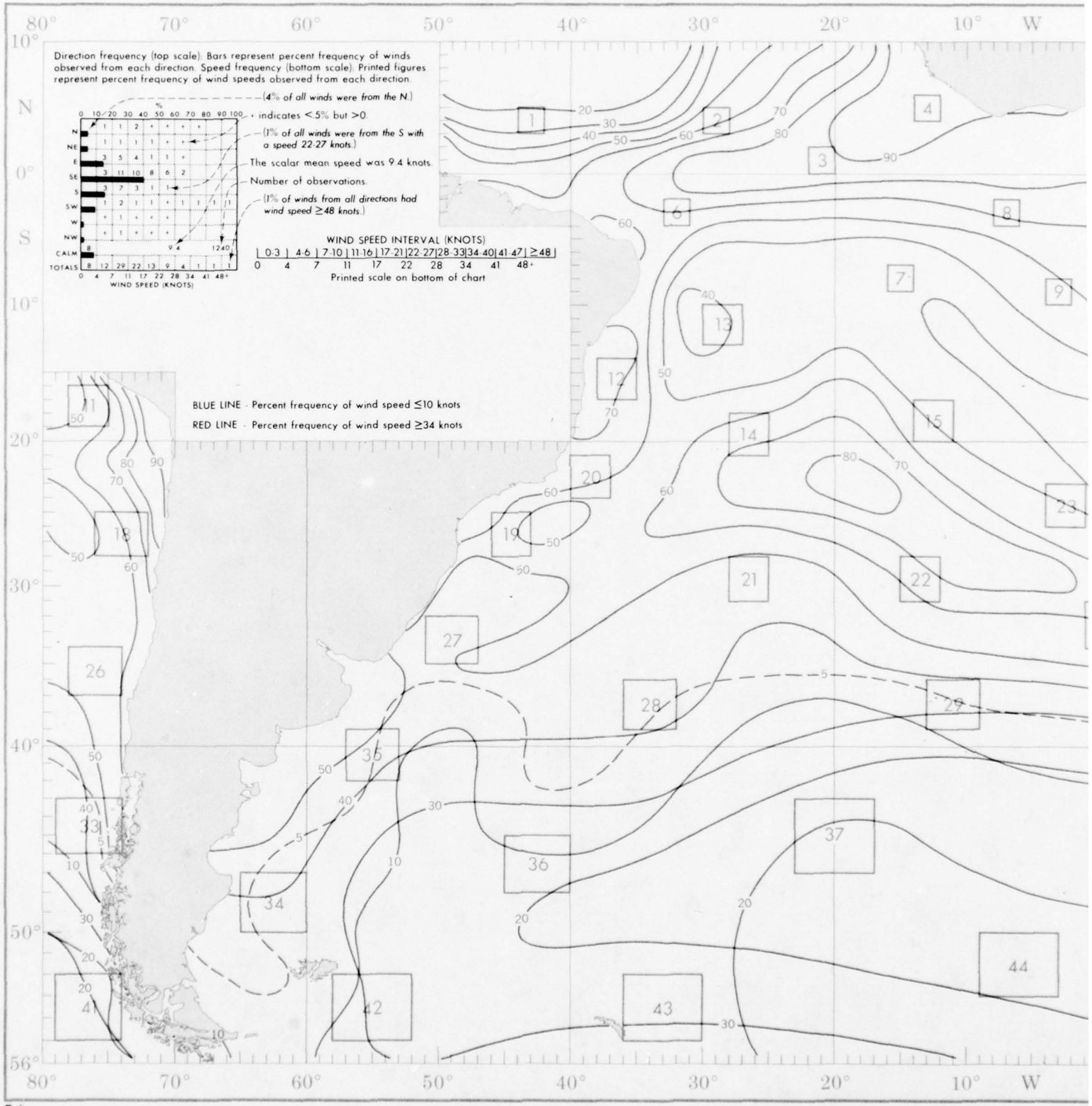
45

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	13	13	7	0	0	0	0
2-2.5	0	0	27	0	0	0	7
3-3.5	7	0	0	0	0	0	7
4-5.5	0	0	7	13	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

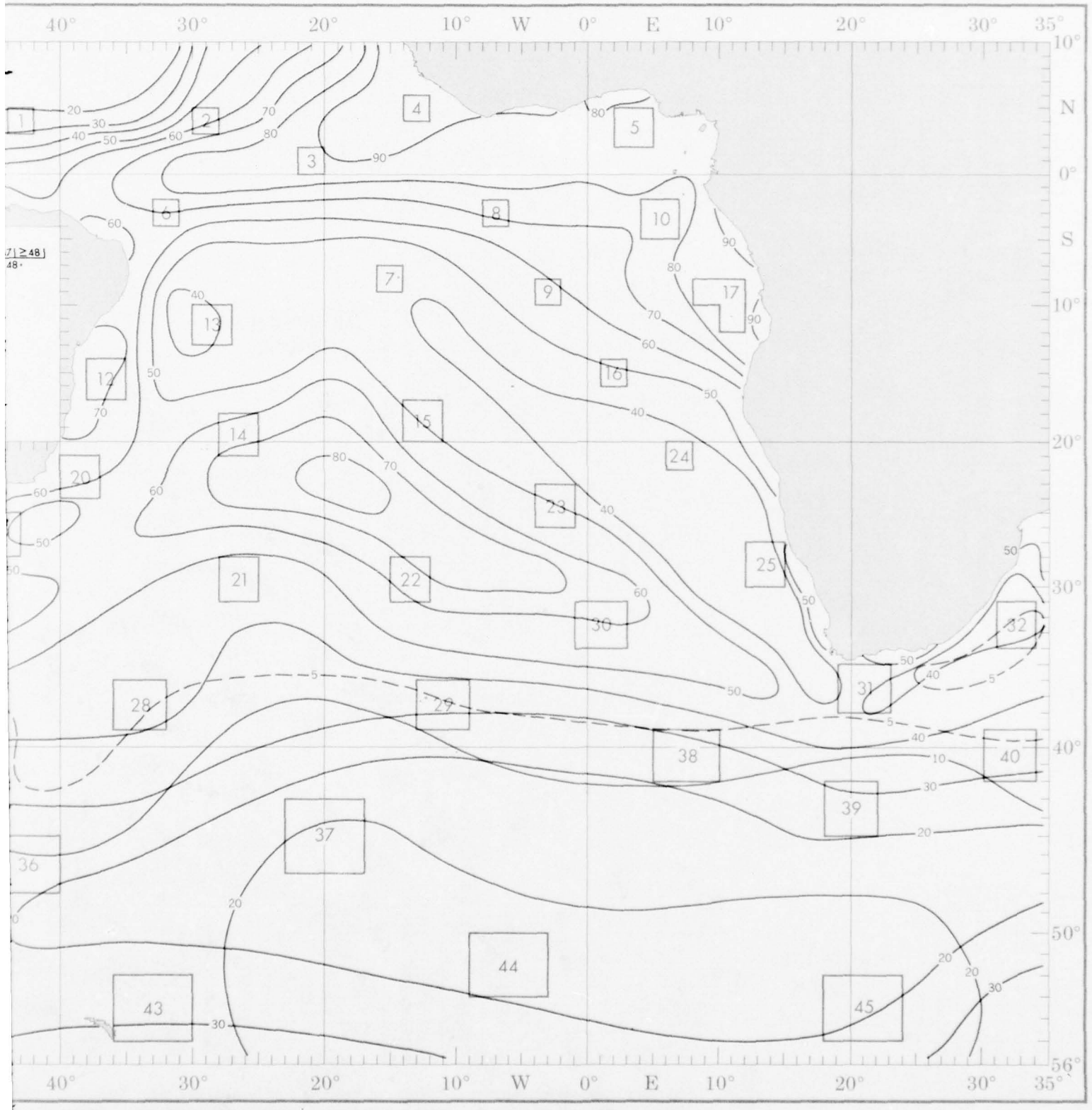
15

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

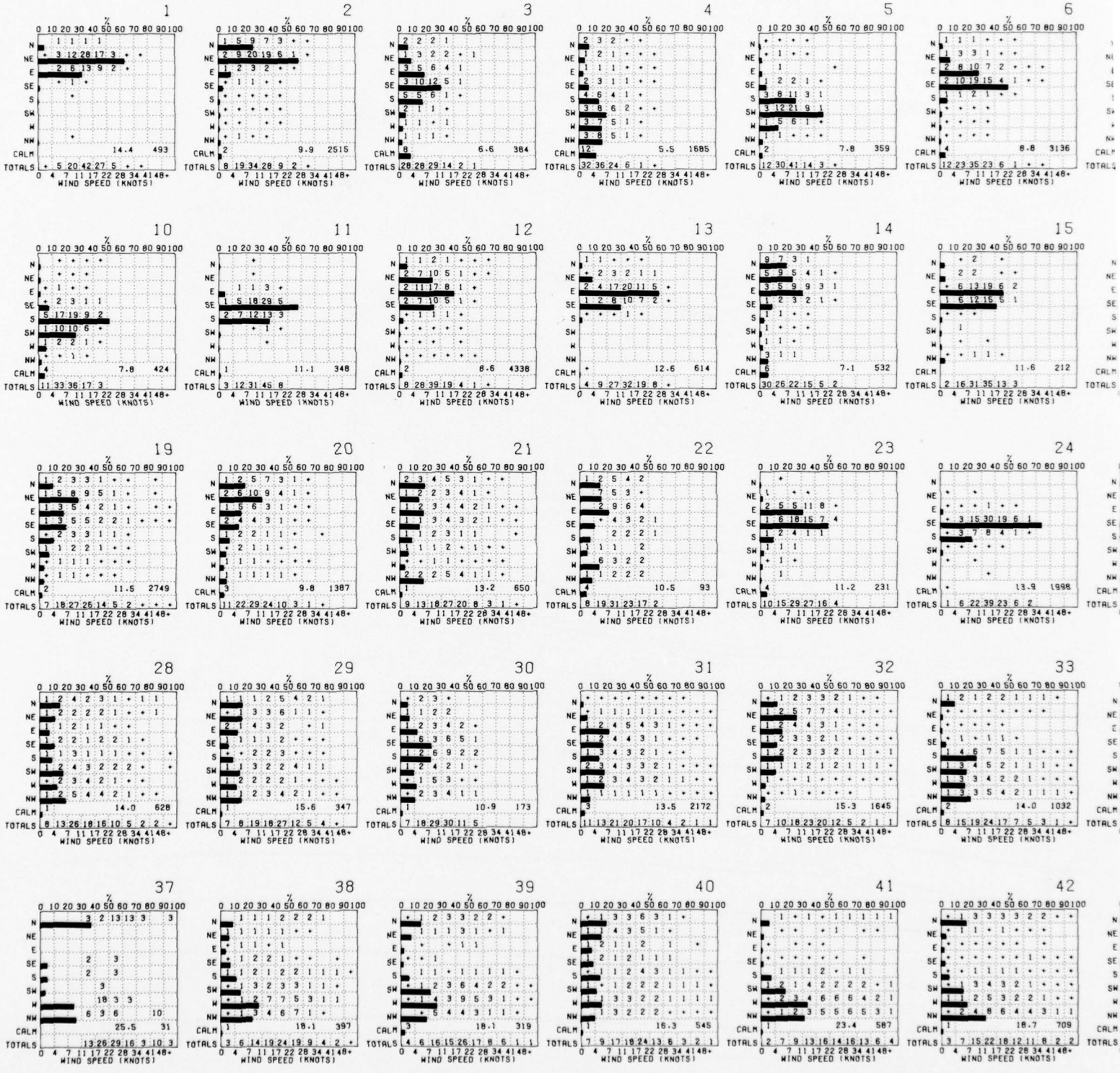
MARCH


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but > 0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots
80° 70° 60° 50° 40° 30° 20° 10° W
10° N 0° S 10° 20° 30° 40° 50° 56°

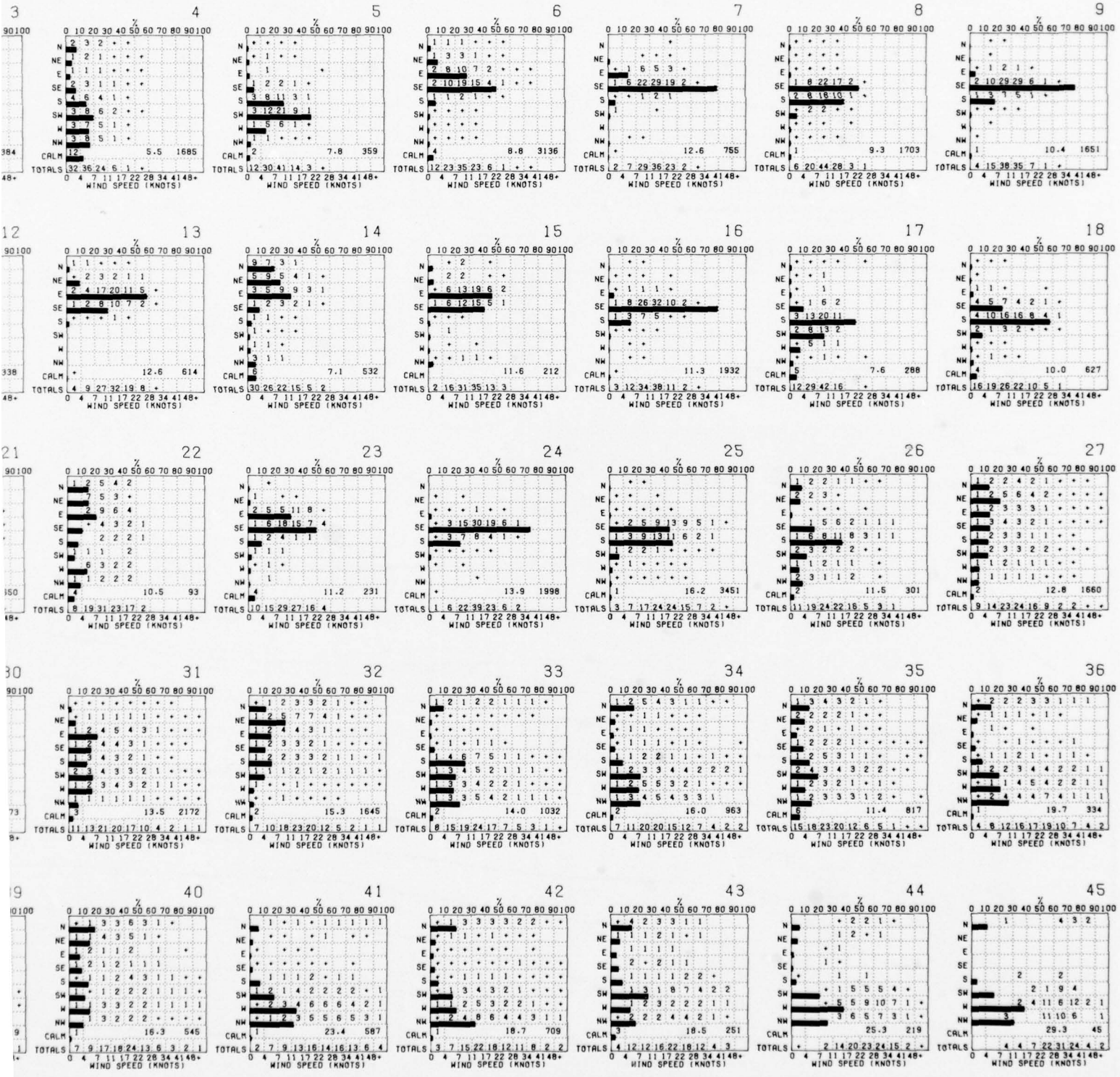
SURFACE WINDS



WIND DIRECTION AND SPEED

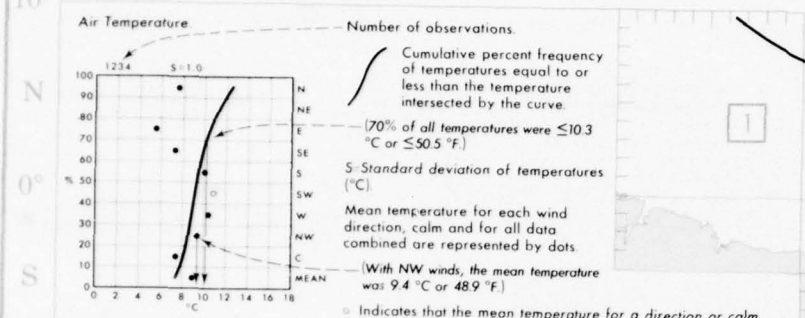


Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia



nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

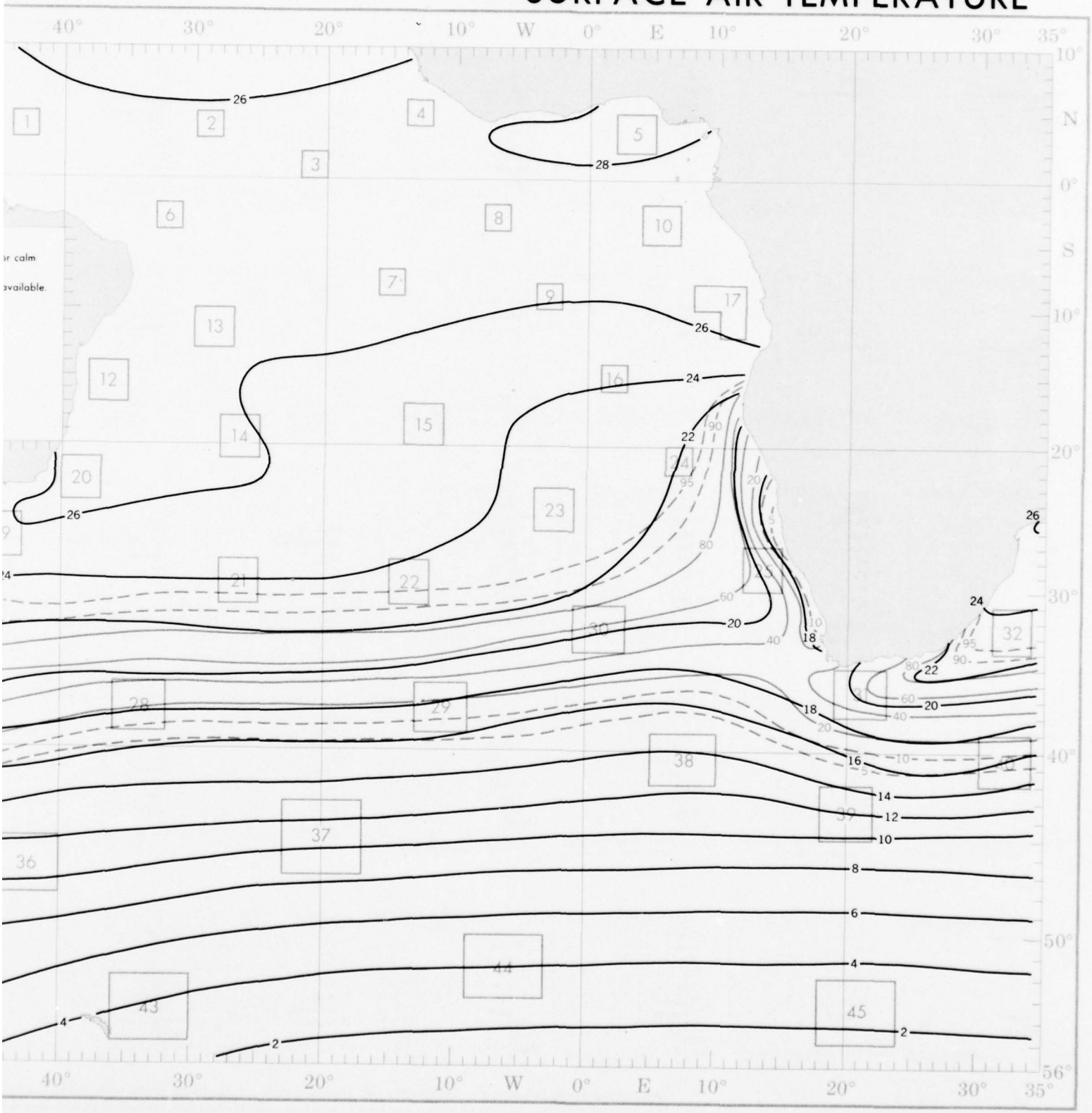
MARCH



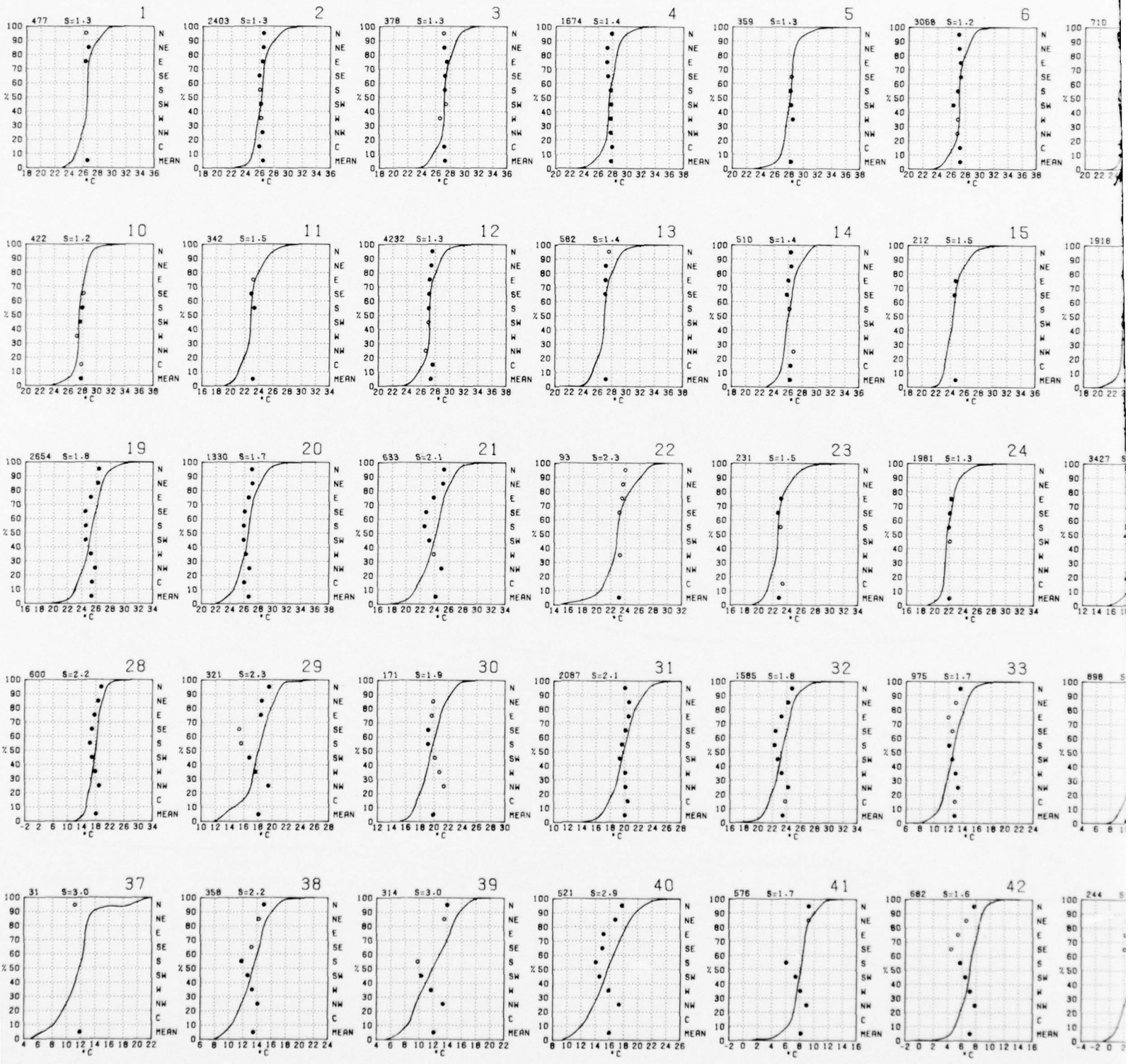
BLACK LINE - Mean air temperature (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE



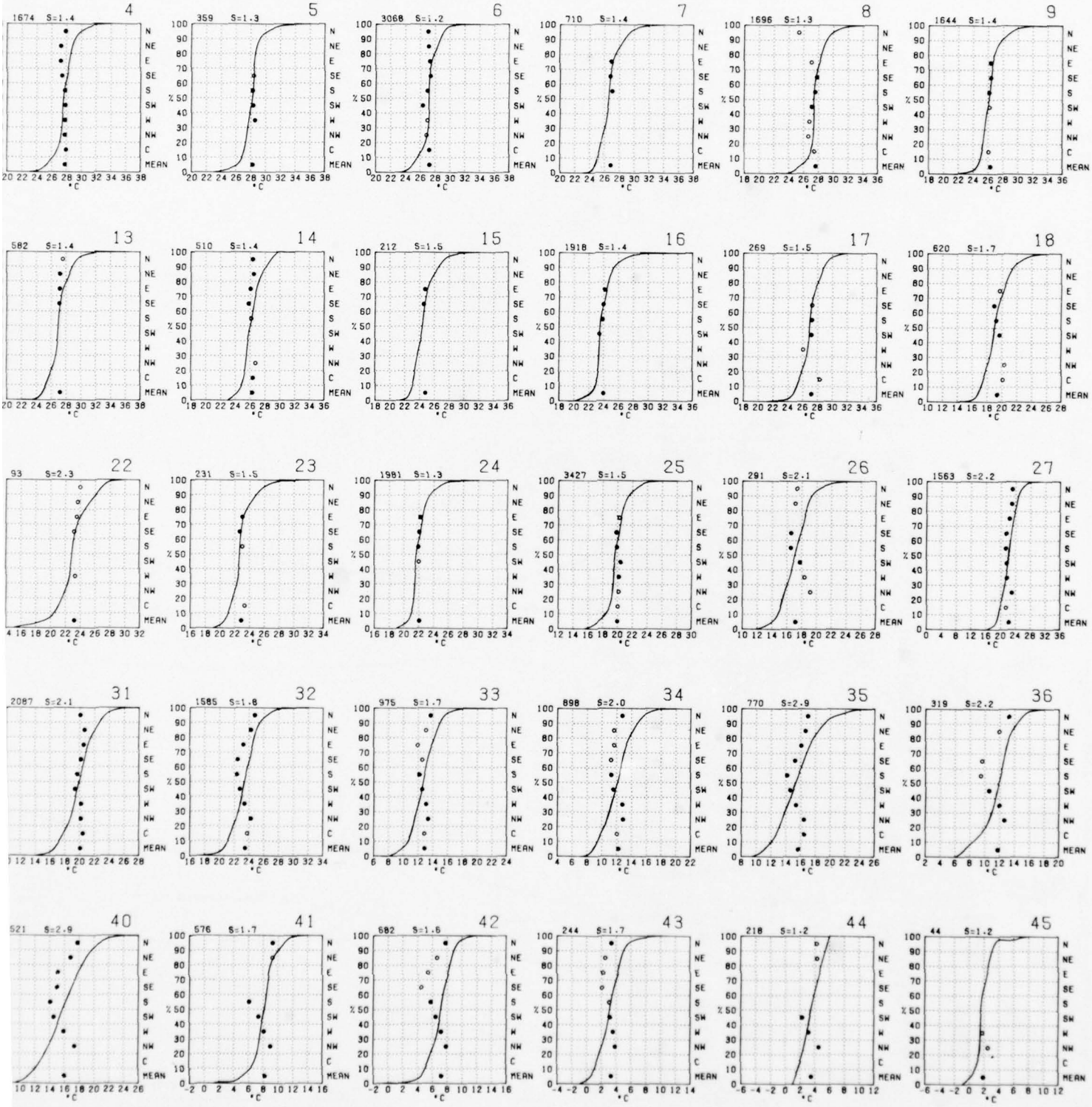
SURFACE AIR TEMPERATURE



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The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

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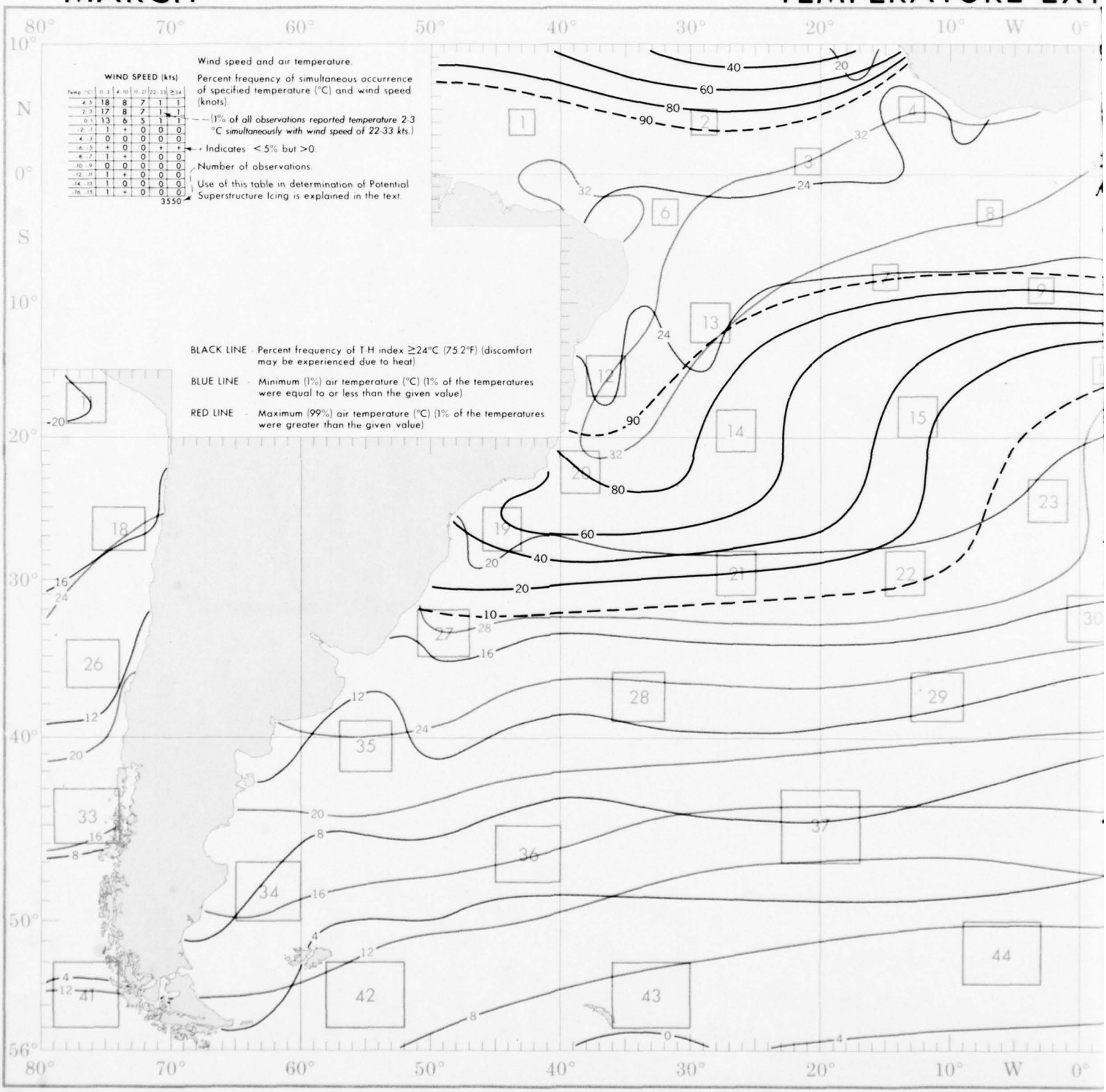
MARCH



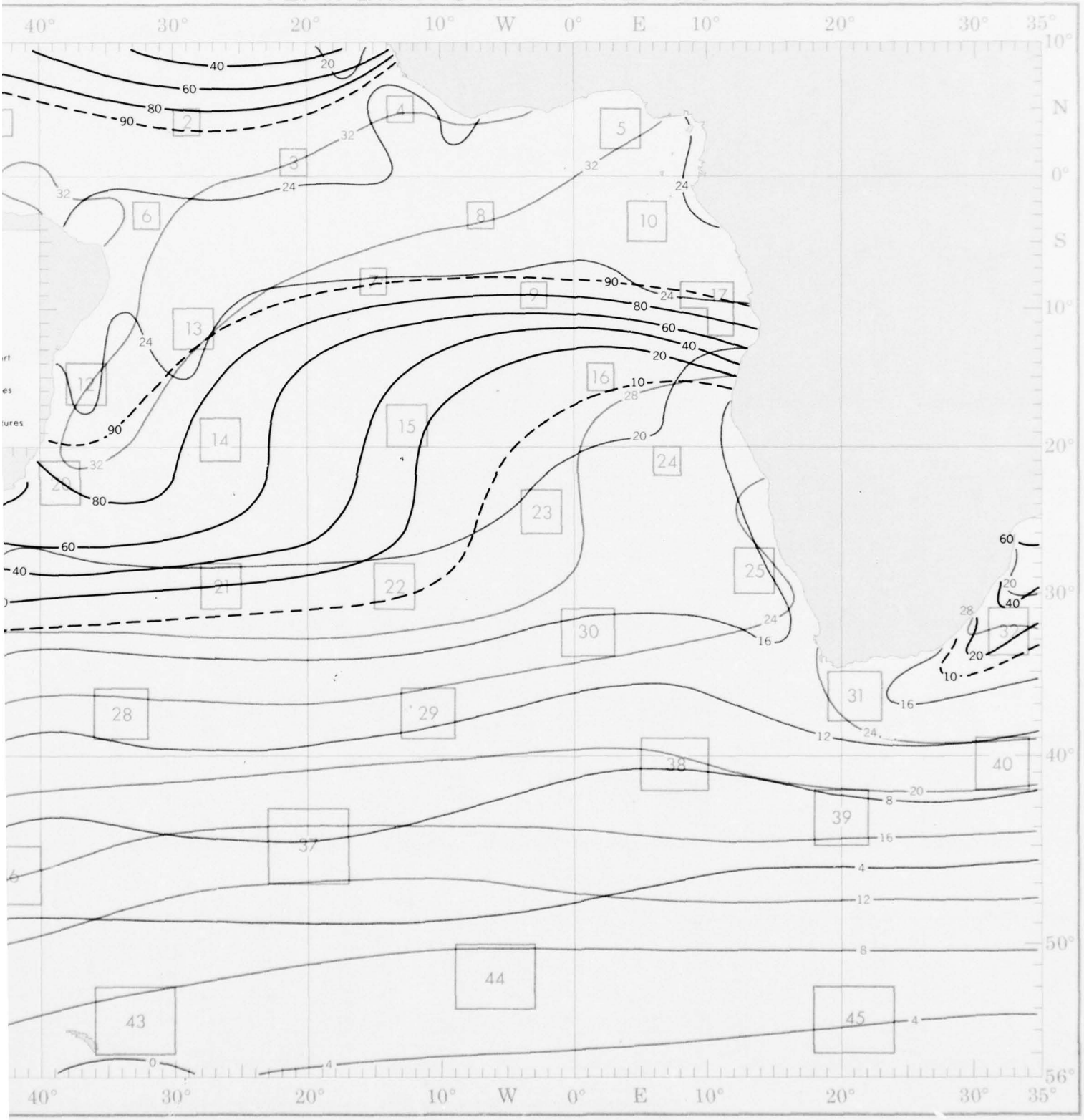
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pposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH

TEMPERATURE EXT



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	1	0	0
28.29	0	5	14	1	+
26.27	+	17	45	3	0
24.25	0	3	8	1	0
22.23	0	0	1	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

477

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	2	1	+	0
28.29	1	10	6	+	0
26.27	5	33	25	1	0
24.25	2	8	5	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2408

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	3	1	0	0
28.29	8	20	6	0	0
26.27	16	31	9	+	0
24.25	1	3	+	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

381

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	1	1	+	0	0
30.31	4	5	+	0	0
28.29	18	30	3	0	0
26.27	11	22	3	+	0
24.25	1	2	1	0	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1785

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	1	0	0	0
30.31	2	7	2	0	0
28.29	8	49	11	0	0
26.27	2	11	2	+	0
24.25	0	2	1	0	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

361

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	2	1	0	0
28.29	4	22	13	+	+
26.27	7	31	13	1	0
24.25	1	3	1	+	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3092

WIND

TEMP (°C)	0-3
34.35	0
32.33	0
30.31	0
28.29	0
26.27	0
24.25	0
22.23	0
20.21	0
18.19	0
16.17	0
14.15	0

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	0	0	0	0
32.33	0	1	0	0	0
30.31	1	3	1	0	0
28.29	6	42	12	0	0
26.27	4	21	6	0	0
24.25	+	1	1	0	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

423

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	1	0	0
26.27	1	2	4	0	0
24.25	1	13	13	0	0
22.23	2	24	29	0	0
20.21	+	4	6	0	0
18.19	0	+	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

343

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	+	+	0	0
32.33	+	1	+	0	0
30.31	1	3	1	0	0
28.29	4	24	9	+	0
26.27	4	36	12	+	0
24.25	+	2	1	+	0
22.23	0	+	+	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4241

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	1	0	0
30.31	+	2	2	+	0
28.29	2	10	14	3	0
26.27	2	20	31	4	0
24.25	+	3	4	+	0
22.23	0	+	0	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

582

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	2	1	+	0	0
28.29	6	8	3	+	0
26.27	15	23	13	1	0
24.25	8	15	5	0	0
22.23	+	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

510

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	+	3	1	0	0
26.27	1	9	10	1	0
24.25	1	26	25	1	0
22.23	0	8	11	1	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

212

WIND

TEMP (°C)	0-3
34.35	0
32.33	0
30.31	0
28.29	0
26.27	+
24.25	1
22.23	1
20.21	+
18.19	0
16.17	0
14.15	0

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	1	1	+	0
28.29	1	4	3	+	0
26.27	4	18	17	1	0
24.25	2	17	15	4	+
22.23	+	4	4	1	+
20.21	0	+	+	+	+
18.19	0	+	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2659

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	1	+	0	0
30.31	+	3	1	+	0
28.29	3	11	10	1	0
26.27	4	25	18	2	0
24.25	3	9	4	1	+
22.23	1	1	1	+	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1331

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	0	0	0	0
30.31	+	+	0	+	0
28.29	+	1	1	+	+
26.27	3	9	10	2	+
24.25	4	14	18	3	+
22.23	2	5	13	4	+
20.21	0	2	4	2	+
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

634

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	3	0	0	0
26.27	1	3	8	0	0
24.25	1	16	10	0	0
22.23	3	26	14	1	0
20.21	2	2	5	0	0
18.19	0	0	0	1	0
16.17	0	0	3	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

93

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	1	1	3	+	0
24.25	4	9	7	1	0
22.23	6	27	22	3	0
20.21	0	6	9	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

233

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	+	0	0
26.27	+	1	1	+	0
24.25	+	3	7	1	0
22.23	1	15	32	4	0
20.21	+	9	22	3	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1985

WIND SP

TEMP (°C)	0-3
28.29	+
26.27	0
24.25	+
22.23	+
20.21	2
18.19	1
16.17	+
14.15	0
12.13	0
10.11	0
8.9	0

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	0	0	0	0	0
24.25	0	1	+	0	0
22.23	+	1	2	+	0
20.21	2	9	9	1	2
18.19	2	15	12	6	1
16.17	3	9	8	3	1
14.15	1	4	2	4	1
12.13	0	+	1	0	0
10.11	0	0	0	0	+
8.9	0	0	0	0	0

600

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	+	0	0
22.23	0	1	1	0	0
20.21	3	4	11	5	1
18.19	2	13	17	6	1
16.17	2	6	10	3	1
14.15	+	2	3	2	0
12.13	+	1	1	1	1
10.11	0	+	0	+	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

321

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	1	0	0
24.25	0	1	1	0	0
22.23	0	11	4	0	0
20.21	2	23	16	2	0
18.19	2	9	15	2	0
16.17	2	2	5	1	0
14.15	0	0	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

171

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	1	2	1	+	0
22.23	3	7	8	2	+
20.21	4	14	15	6	1
18.19	3	8	9	4	1
16.17	1	3	3	1	1
14.15	+	+	+	+	+
12.13	0	+	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2097

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	+	+	+	0
26.27	1	3	5	2	+
24.25	3	11	18	5	1
22.23	2	10	15	6	1
20.21	1	4	4	3	1
18.19	0	+	+	+	+
16.17	0	0	0	0	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1588

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	+	0	0	0
16.17	1	2	3	1	+
14.15	2	11	13	4	1
12.13	3	14	16	5	2
10.11	1	5	9	3	1
8.9	0	1	+	0	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

975

WIND SP

TEMP (°C)	0-3
18.19	0
16.17	+
14.15	1
12.13	3
10.11	3
8.9	1
6.7	0
4.5	0
2.3	0
0.1	0
-2.-1	0

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	6	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	10	3	0
12.13	0	0	6	26	10
10.11	0	0	6	6	3
8.9	0	0	16	3	0
6.7	0	0	0	0	3
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

31

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	+	0	0
20.21	0	0	0	0	0
18.19	0	1	1	+	0
16.17	1	3	7	5	+
14.15	1	10	12	10	2
12.13	1	3	13	8	3
10.11	1	2	8	4	1
8.9	0	1	2	1	1
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

358

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	1	1	1	0
16.17	0	2	4	4	1
14.15	2	4	10	6	2
12.13	1	5	8	4	1
10.11	0	4	11	7	1
8.9	1	3	6	3	1
6.7	0	3	2	1	1
4.5	0	+	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

314

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	1	+	0
22.23	+	+	1	1	0
20.21	1	2	6	2	+
18.19	1	5	6	3	+
16.17	1	8	13	4	1
14.15	3	6	9	4	2
12.13	1	4	5	2	1
10.11	+	1	1	2	1
8.9	0	0	+	0	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0

521

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	+	1	1	+	0
10.11	0	3	7	6	6
8.9	1	5	12	15	11
6.7	1	5	9	7	5
4.5	0	1	1	1	+
2.3	0	0	1	+	+
0.1	0	0	+	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

576

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	+	0
10.11	+	1	2	1	1
8.9	1	7	17	10	6
6.7	1	12	17	8	3
4.5	+	3	3	4	1
2.3	0	0	+	1	1
0.1	0	+	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

682

WIND SP

TEMP (°C)	0-3
8.9	0
6.7	+
4.5	2
2.3	1
0.1	+
-2.-1	0
-4.-3	0
-6.-5	0
-8.-7	0
-10.-9	0
-12.-11	0

Graphs represent the objective compilation of available data for specified areas without regard to suspected b
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was e

MPERATURE

MARCH

4

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	1	1	+	0	0
30.31	4	5	+	0	0
28.29	18	30	3	0	0
26.27	11	22	3	+	0
24.25	1	2	1	0	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1785

5

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	1	0	0	0
30.31	2	7	2	0	0
28.29	8	49	11	0	0
26.27	2	11	2	+	0
24.25	0	2	1	0	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

361

6

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	2	1	0	0
28.29	4	22	13	+	+
26.27	7	31	13	1	0
24.25	1	3	1	+	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3092

7

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	+	0	0
30.31	0	2	2	+	0
28.29	1	9	12	+	0
26.27	1	22	36	1	0
24.25	0	4	7	+	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

711

8

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	+	1	1	0	0
30.31	+	5	2	+	0
28.29	2	26	15	+	0
26.27	3	30	12	+	0
24.25	+	1	1	0	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1709

9

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	+	0	0
32.33	+	+	+	0	0
30.31	+	1	1	0	0
28.29	1	7	6	+	0
26.27	2	32	25	1	0
24.25	1	12	8	+	0
22.23	+	+	+	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1649

13

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	1	0	0
30.31	+	2	2	+	0
28.29	2	10	14	3	0
26.27	2	20	31	4	0
24.25	+	3	4	+	0
22.23	0	+	0	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

582

14

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	2	1	+	0	0
28.29	6	8	3	+	0
26.27	15	23	13	1	0
24.25	8	15	5	0	0
22.23	+	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

510

15

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	+	3	1	0	0
26.27	1	9	10	1	0
24.25	1	26	25	1	0
22.23	0	8	11	1	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

212

16

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	0	1	1	0	0
26.27	+	5	4	+	0
24.25	1	23	24	1	0
22.23	1	17	19	1	0
20.21	+	+	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1921

17

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	3	3	+	0	0
28.29	5	27	5	+	0
26.27	5	31	9	0	0
24.25	0	7	2	0	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

271

18

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	1	1	0	0	0
22.23	3	5	2	+	0
20.21	6	14	9	1	0
18.19	4	20	19	3	0
16.17	2	4	3	2	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

622

22

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	0	3	0	0	0
26.27	1	3	8	0	0
24.25	1	16	10	0	0
22.23	3	26	14	1	0
20.21	2	2	5	0	0
18.19	0	0	0	1	0
16.17	0	0	3	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

93

23

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	1	1	3	+	0
24.25	4	9	7	1	0
22.23	6	27	22	3	0
20.21	0	6	9	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

233

24

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	+	0	0
26.27	+	1	1	+	0
24.25	+	3	7	1	0
22.23	1	15	32	4	0
20.21	+	9	22	3	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1985

25

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	+	0	0
26.27	0	+	+	0	0
24.25	+	1	1	+	+
22.23	+	4	5	2	+
20.21	2	13	25	10	1
18.19	1	6	15	9	1
16.17	+	1	1	1	+
14.15	0	+	+	0	0
12.13	0	+	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

3438

26

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	2	+	0	0
20.21	2	4	3	+	0
18.19	3	15	10	2	0
16.17	4	13	15	3	1
14.15	1	8	7	3	1
12.13	0	+	2	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

291

27

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	+	+	0	0
26.27	+	2	2	1	0
24.25	2	10	10	2	+
22.23	3	14	15	3	1
20.21	2	7	9	3	1
18.19	1	3	4	1	+
16.17	0	+	+	+	0
14.15	0	0	0	0	0
12.13	0	0	+	0	0
10.11	0	0	0	0	0

1568

31

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	1	2	1	+	0
22.23	3	7	8	2	+
20.21	4	14	15	6	1
18.19	3	8	9	4	1
16.17	1	3	3	1	1
14.15	+	+	+	+	+
12.13	0	+	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2097

32

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	+	+	+	0
26.27	1	3	5	2	+
24.25	3	11	18	5	1
22.23	2	10	15	6	1
20.21	1	4	4	3	1
18.19	0	+	+	+	+
16.17	0	0	0	0	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1588

33

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	+	0	0	0
16.17	1	2	3	1	+
14.15	2	11	13	4	1
12.13	3	14	16	5	2
10.11	1	5	9	3	1
8.9	0	1	+	0	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

975

34

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	+	+	0
16.17	+	3	2	1	+
14.15	1	6	7	4	1
12.13	3	12	14	7	3
10.11	3	8	9	5	2
8.9	1	2	2	2	2
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

900

35

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	+	0	0
22.23	+	1	1	+	0
20.21	2	2	3	1	0
18.19	3	6	5	1	0
16.17	4	10	7	2	+
14.15	4	12	8	3	1
12.13	2	7	6	3	1
10.11	+	2	2	1	0
8.9	+	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

770

36

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	+	0	0
16.17	0	1	1	1	+
14.15	1	4	6	7	3
12.13	1	6	17	10	3
10.11	2	6	7	9	2
8.9	1	2	3	2	2
6.7	0	0	1	2	2
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

319

40

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	1	+	0
22.23	+	+	1	1	0
20.21	1	2	6	2	+
18.19	1	5	6	3	+
16.17	1	8	13	4	1
14.15	3	6	9	4	2
12.13	1	4	5	2	1
10.11	+	1	1	2	1
8.9	0	0	+	0	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0

521

41

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
12.13	+	1	1	+	0
10.11	0	3	7	6	6
8.9	1	5	12	15	11
6.7	1	5	9	7	5
4.5	0	1	1	1	+
2.3	0	0	1	+	0
0.1	0	0	+	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

576

42

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	+	0
10.11	+	1	2	1	1
8.9	1	7	17	10	6
6.7	1	12	17	8	3
4.5	+	3	3	4	1
2.3	0	0	+	1	1
0.1	0	+	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

682

43

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
8.9	0	1	0	0	0
6.7	+	4	3	2	+
4.5	2	6	12	10	4
2.3	1	9	16	15	2
0.1	+	4	3	2	1
-2.-1	0	0	2	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

245

44

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
6.7	0	0	1	1	3
4.5	0	1	19	23	5
2.3	0	1	13	21	8
0.1	0	0	1	2	1
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0

218

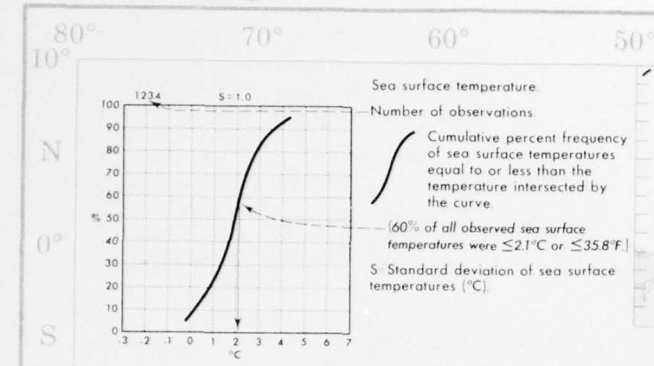
45

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
6.7	0	0	0	2	0
4.5	0	2	0	2	2
2.3	0	2	5	32	18
0.1	0	0	7	18	9
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0

44

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

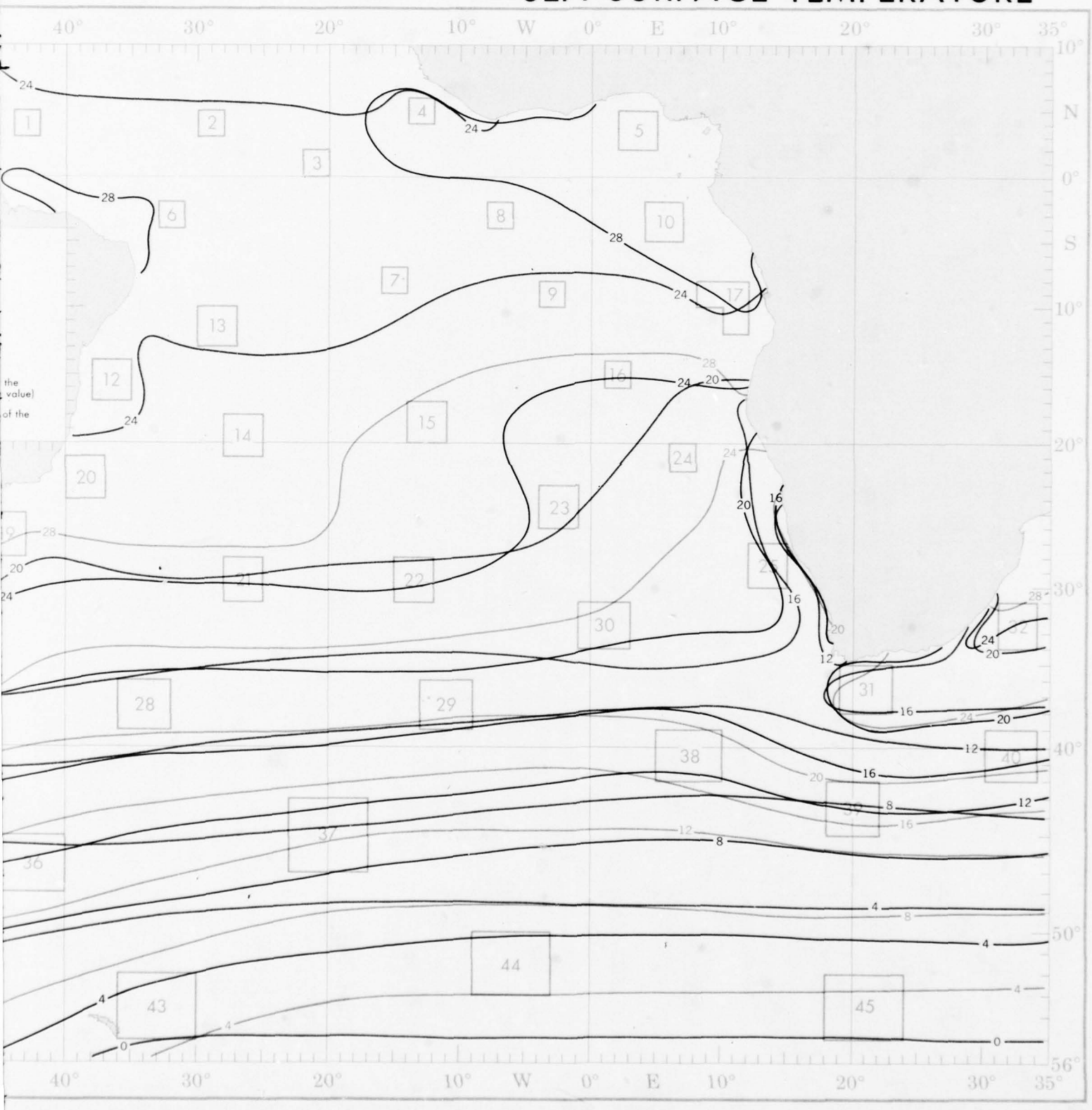
S: Standard deviation of sea surface temperatures (°C).

BLACK LINE - *Mean sea surface temperature (°C)*

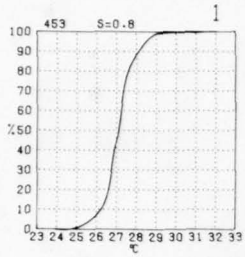
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

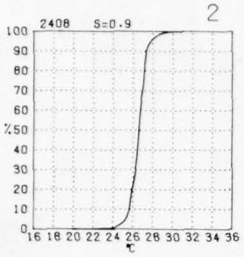
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

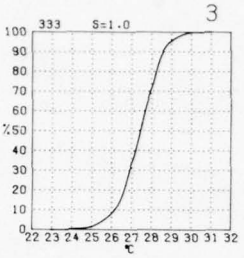
SEA SURFACE TEMPERATURE

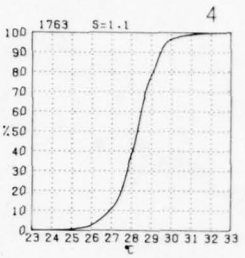


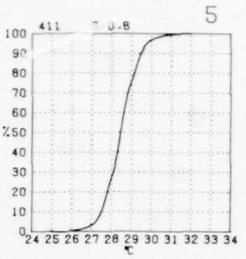
SEA SURFACE TEMPERATURE

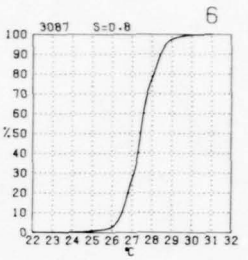


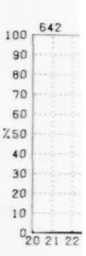


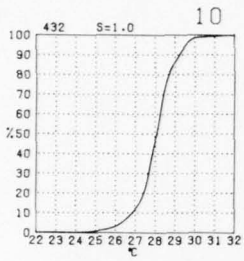


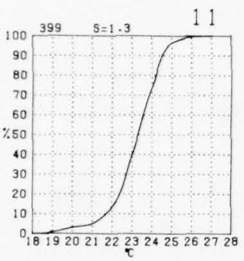


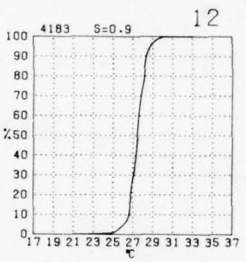


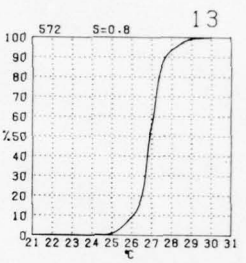


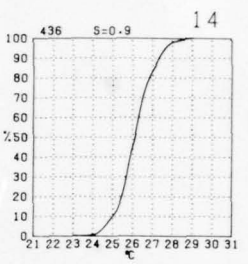


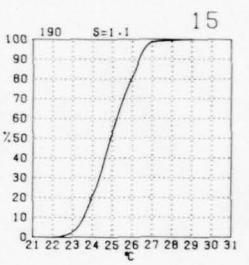


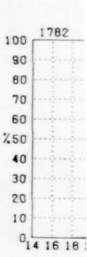


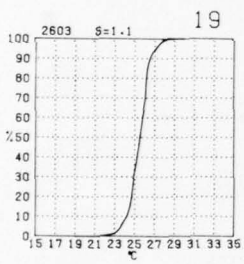


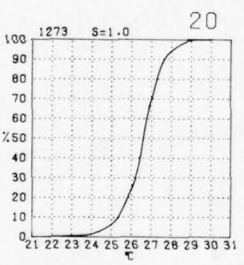


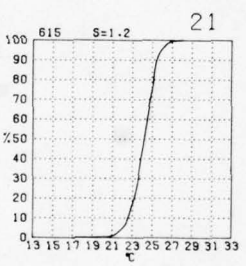


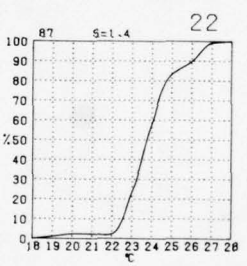


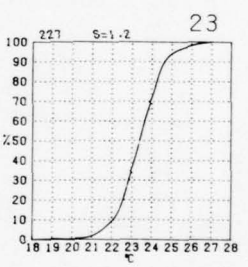


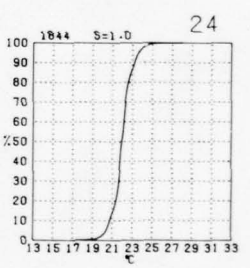


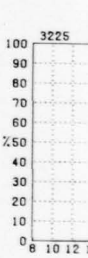


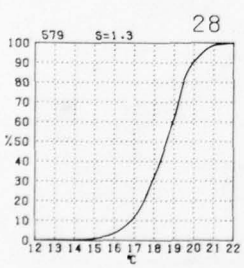


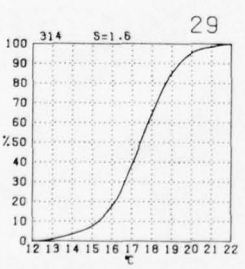


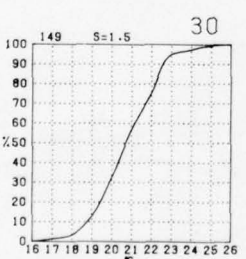


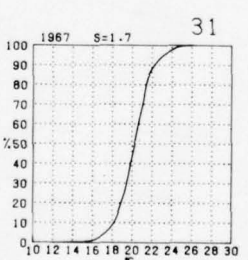


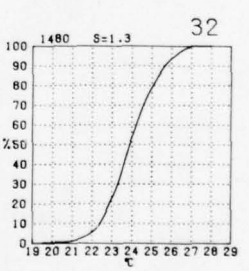


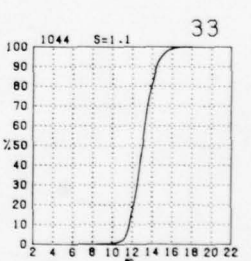


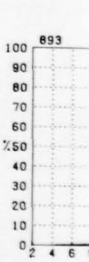


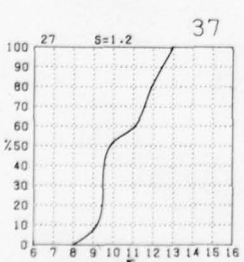


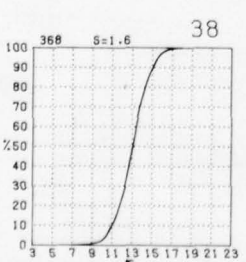


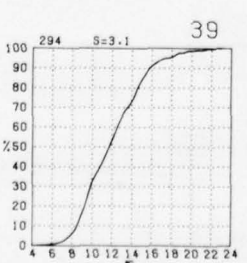


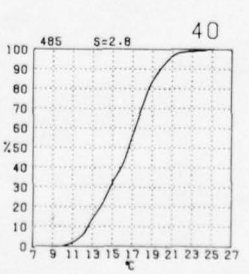


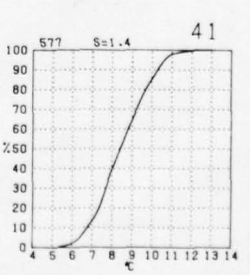


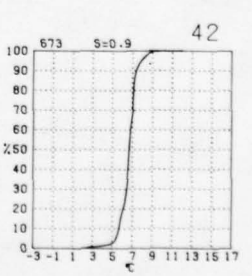


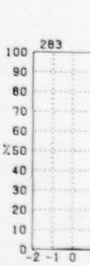




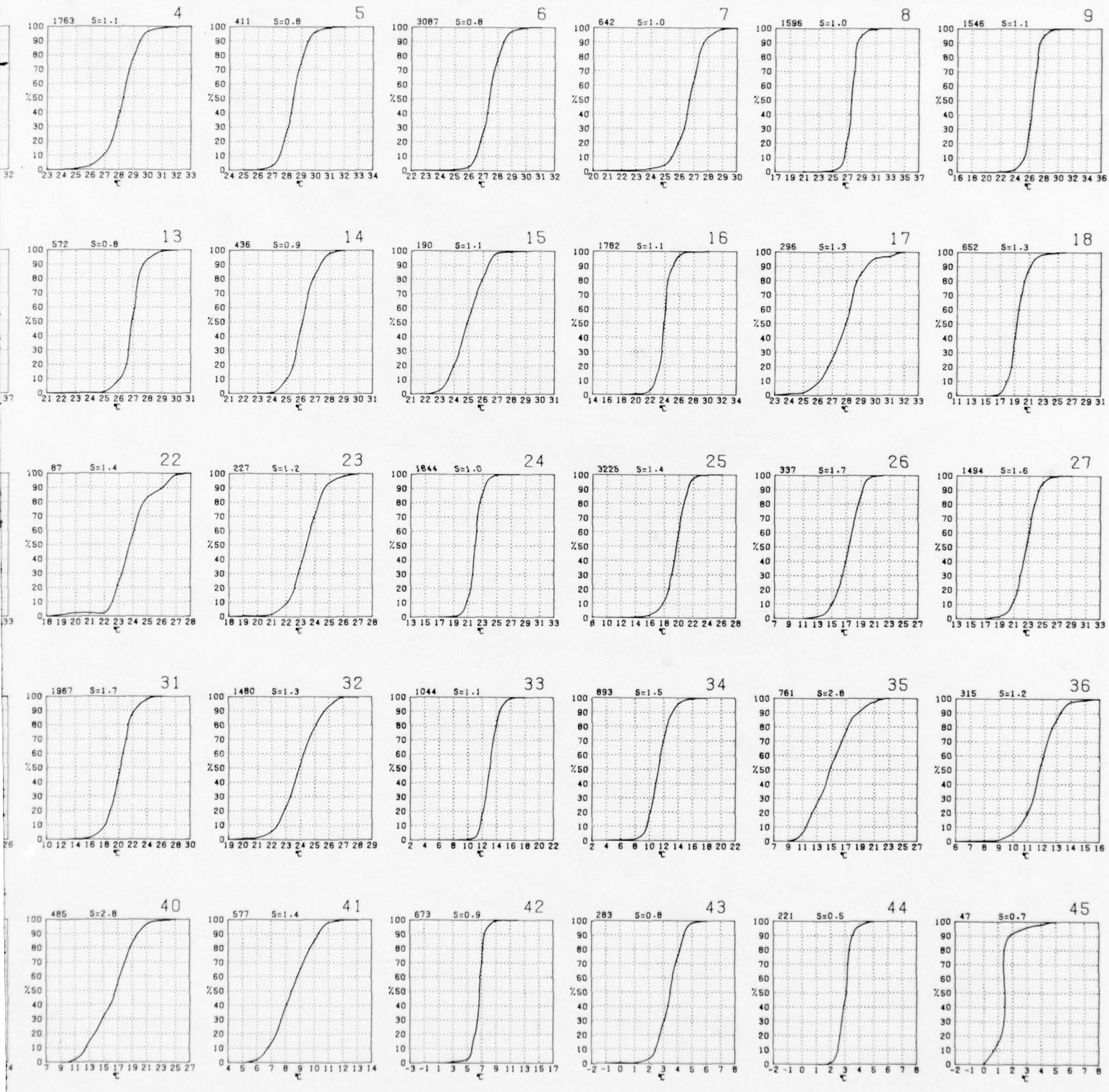






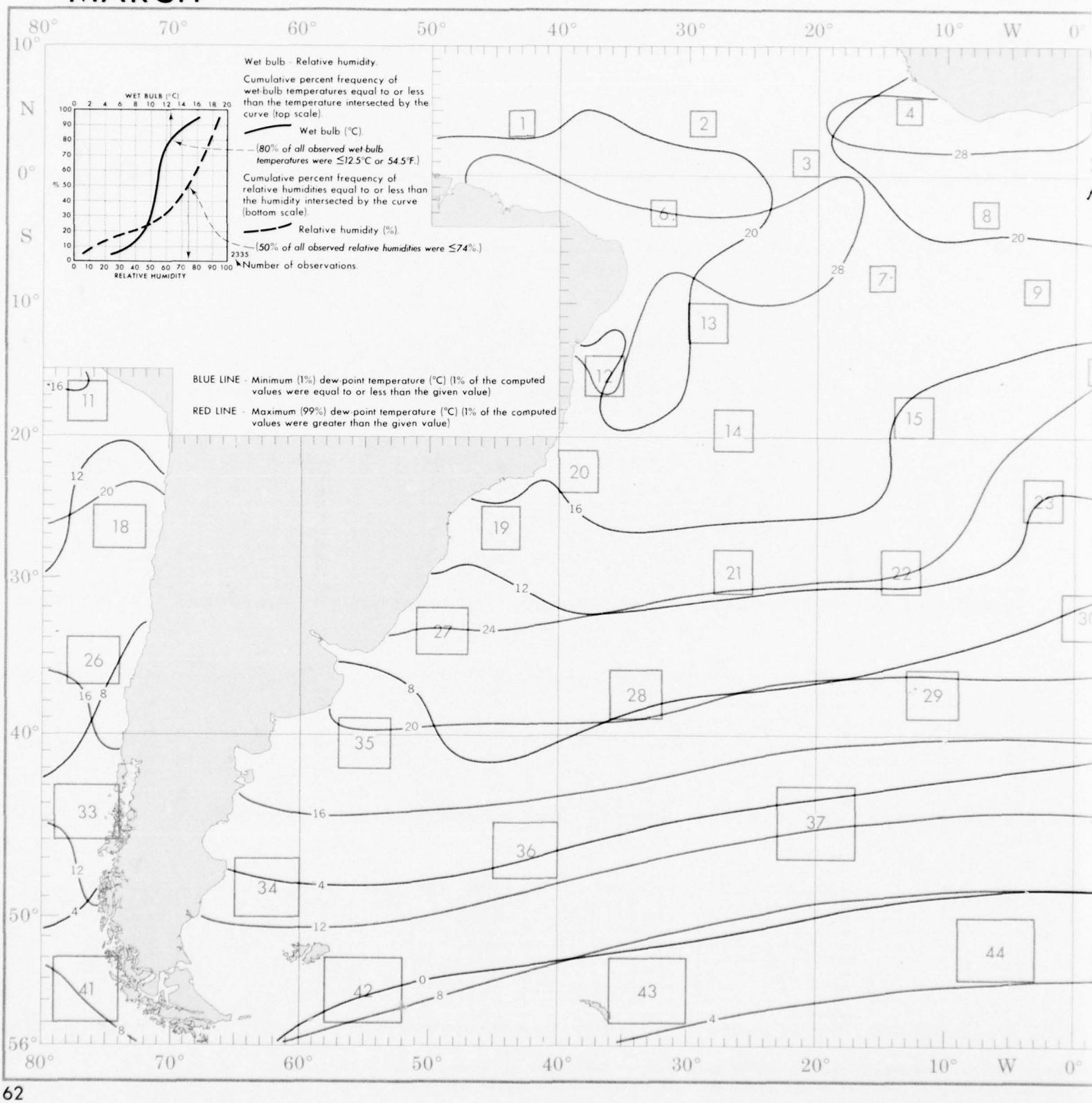


Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was

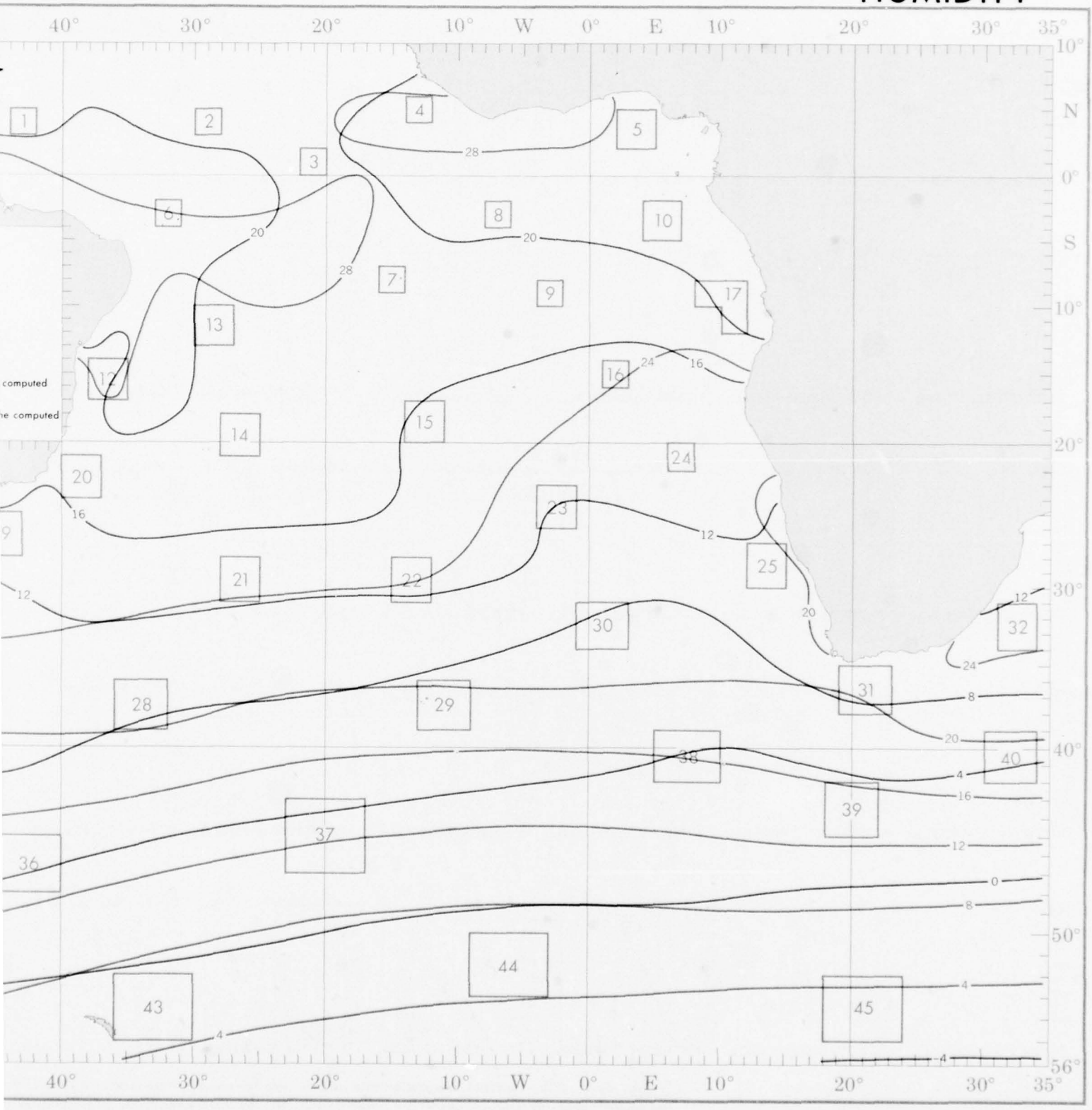


t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

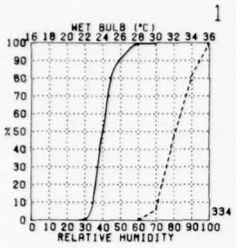
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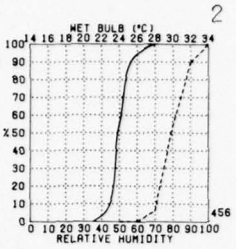

Wet bulb - Relative humidity.
Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).
Wet bulb (°C).
(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)
Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).
Relative humidity (%).
(50% of all observed relative humidities were ≤74%.)
Number of observations.
WET BULB (°C)
RELATIVE HUMIDITY
2335
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10° N
0°
S
10°
20°
30°
40°
50°
56°

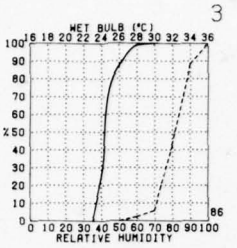
HUMIDITY

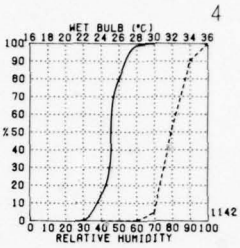

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
28 20 28 20 24 16 16 12 12 12 20 24 8 20 4 16 12 0 8 4 4
computed
computed

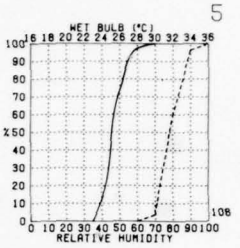
WET BULB AND RELATIVE HUMIDITY

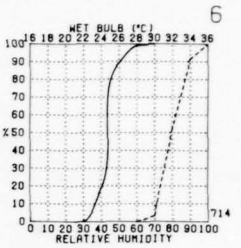


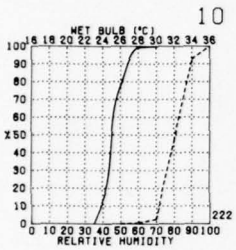


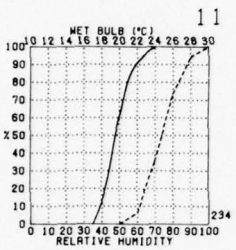


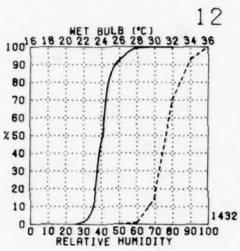


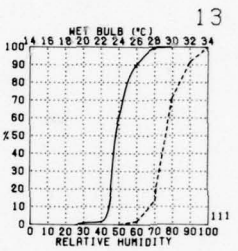






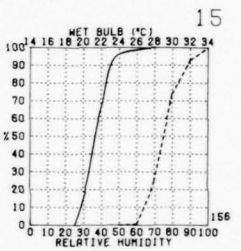


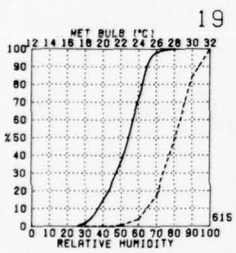


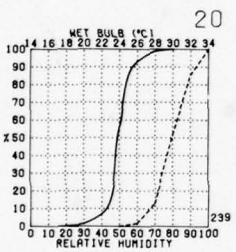


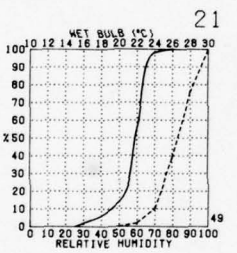
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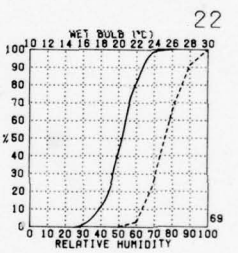
INSUFFICIENT DATA

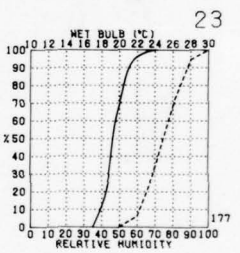


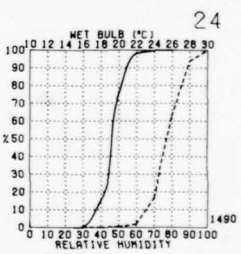


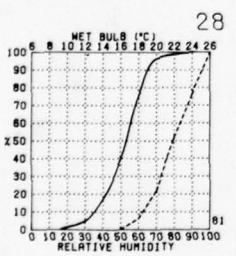


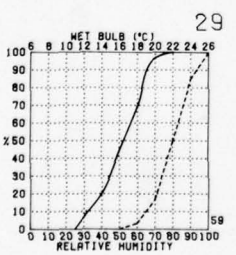


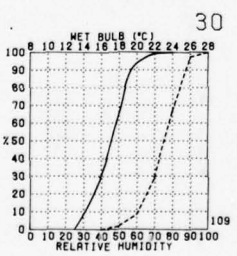


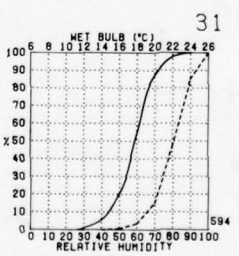


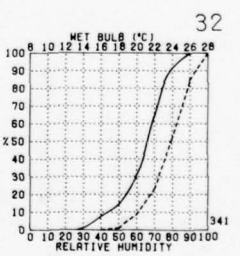


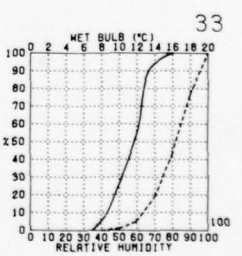






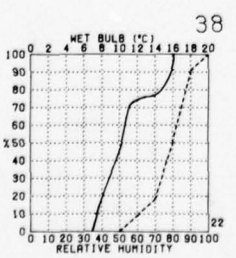


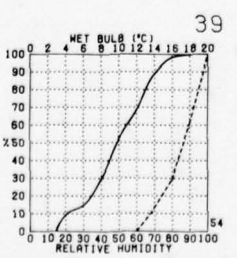


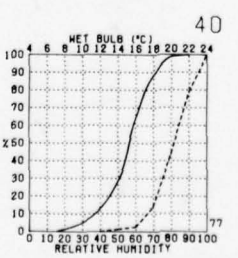


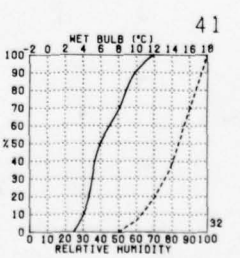
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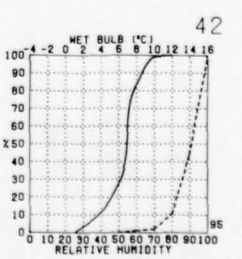
INSUFFICIENT DATA









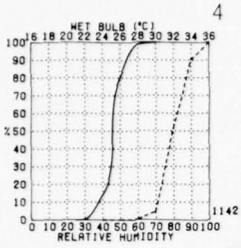


Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias v

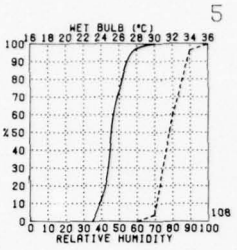
HUMIDITY

MARCH

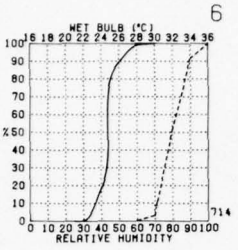
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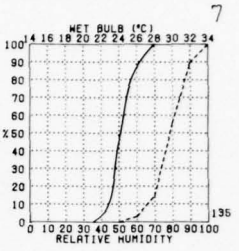
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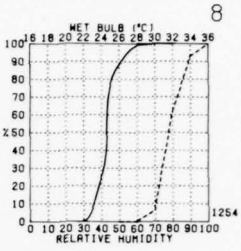
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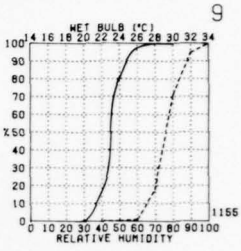
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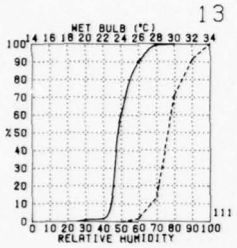
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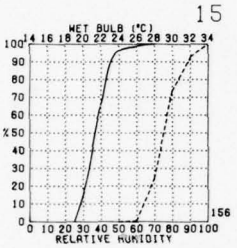
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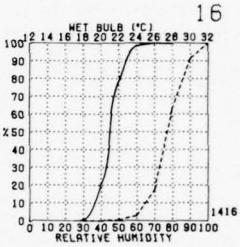
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INSUFFICIENT DATA

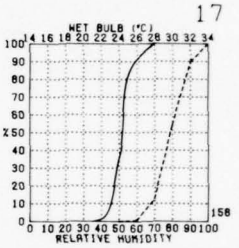
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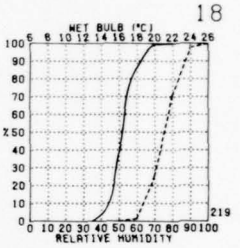
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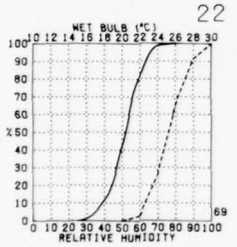
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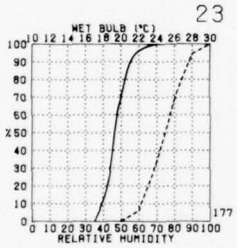
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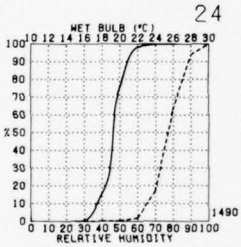
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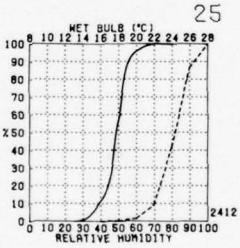
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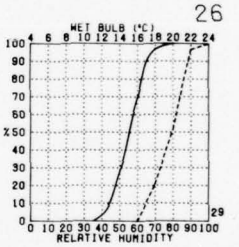
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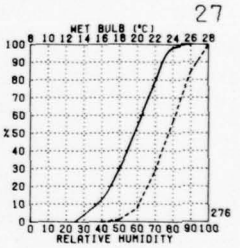
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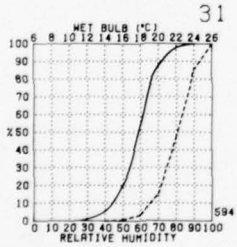
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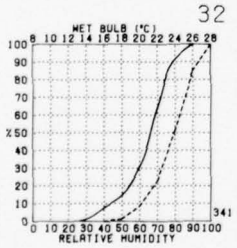
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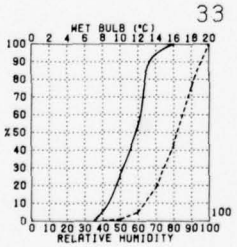
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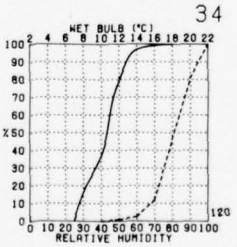
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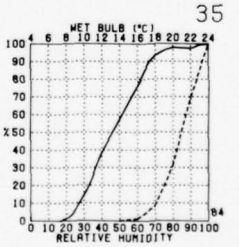
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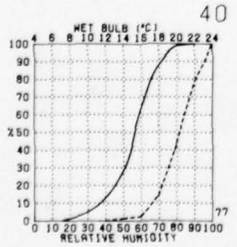
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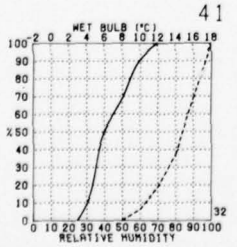
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INSUFFICIENT DATA

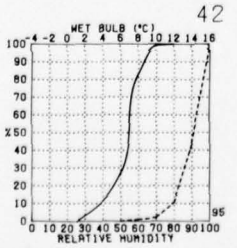
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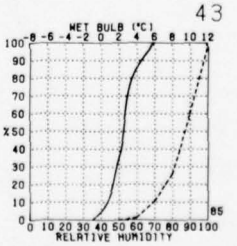
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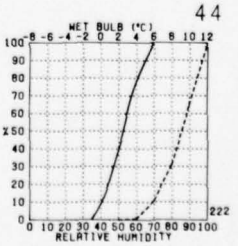
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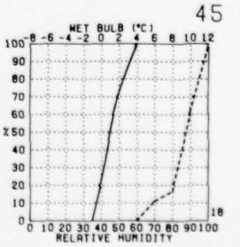
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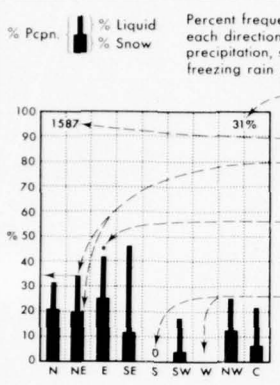


45



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ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

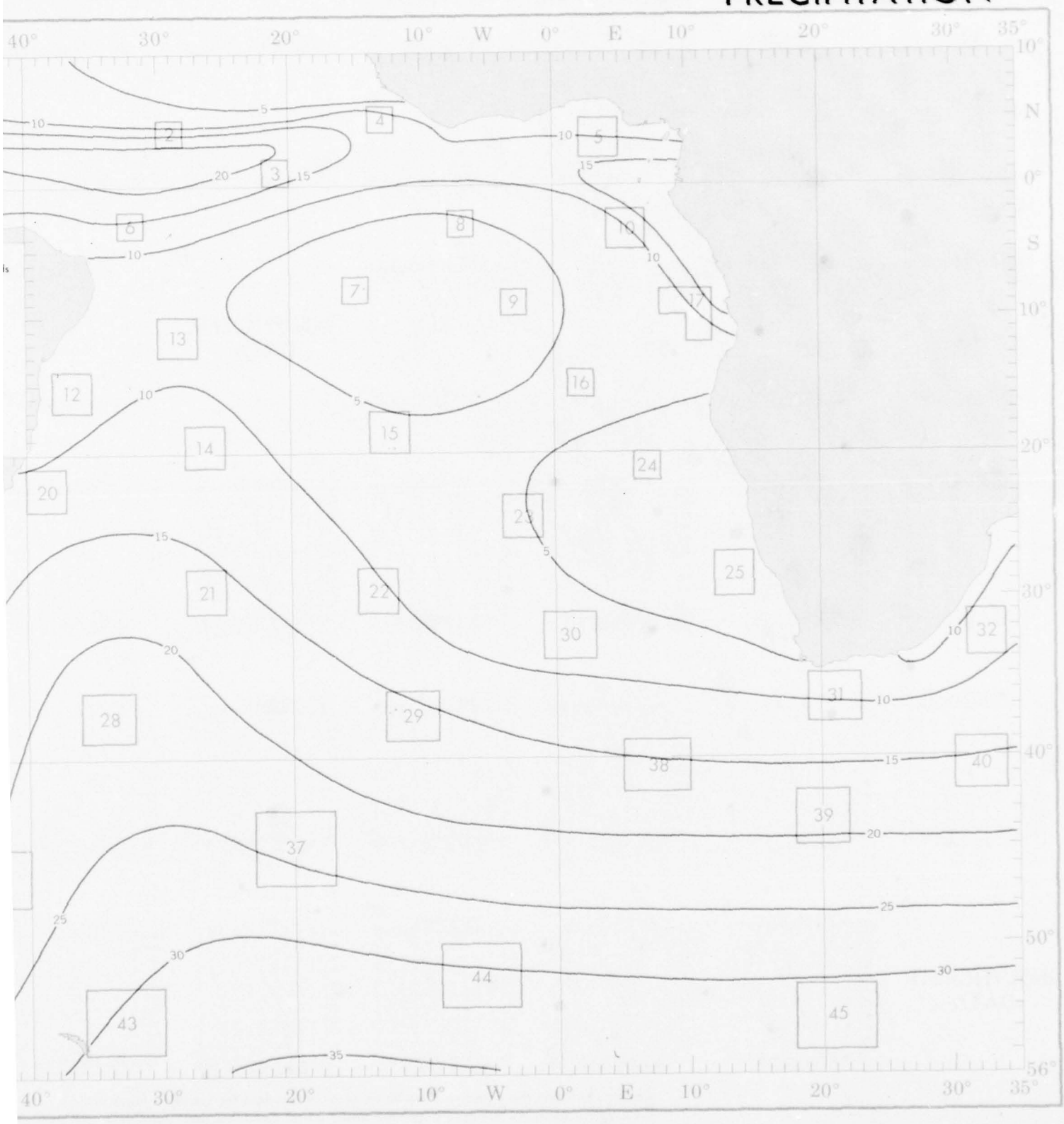
(*34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.*)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

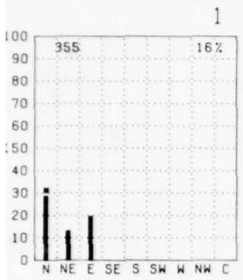
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

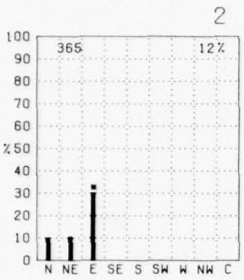
RED LINE - Percent frequency of observations reporting precipitation

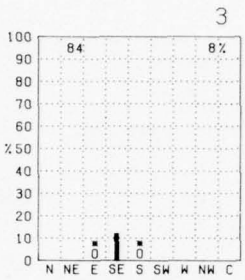
PRECIPITATION

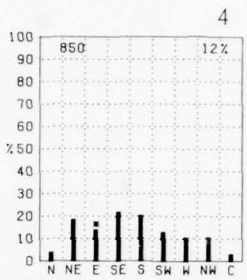


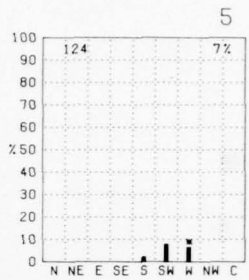
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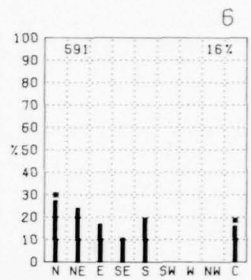


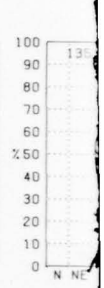


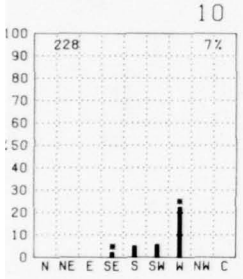


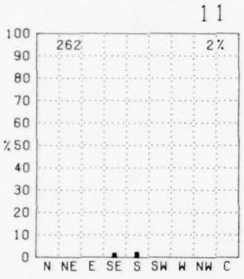


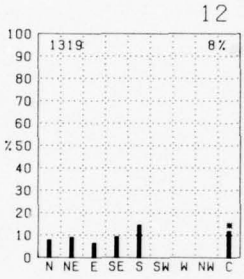


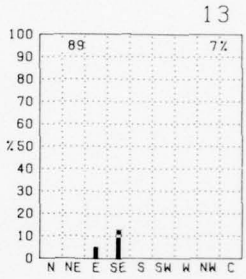






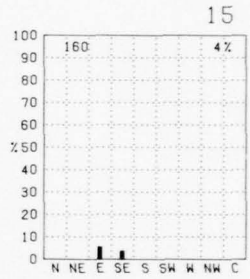


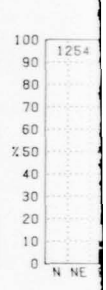


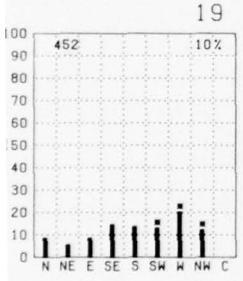


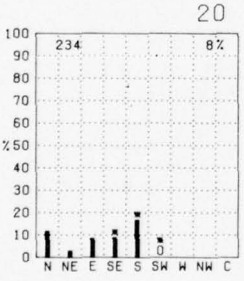
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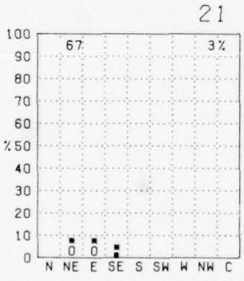
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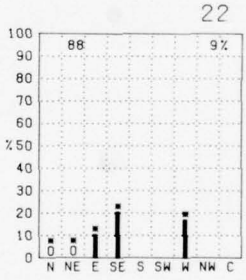


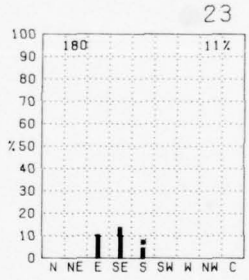


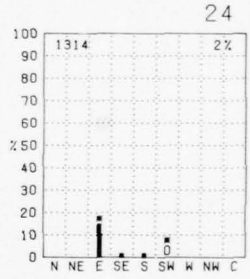


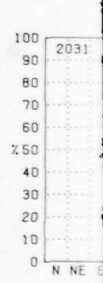


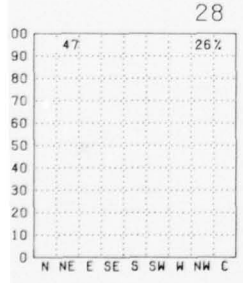


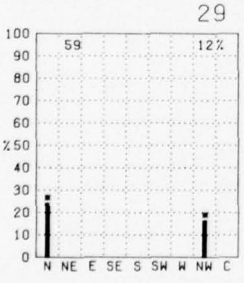


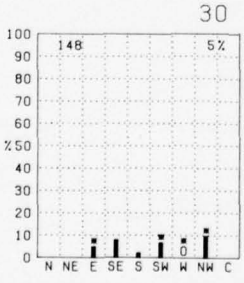


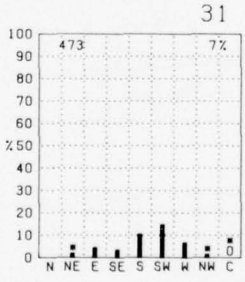


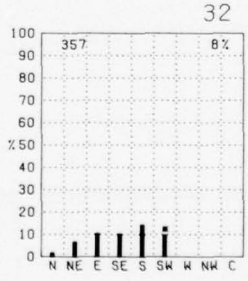


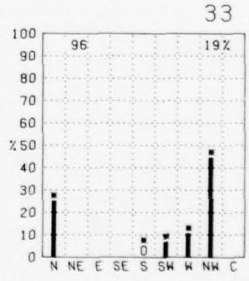


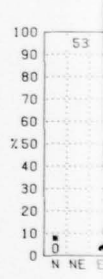






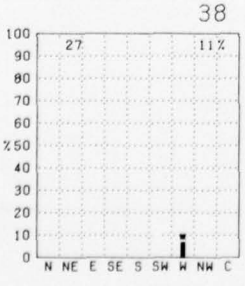


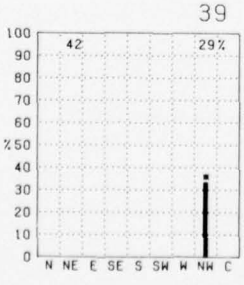


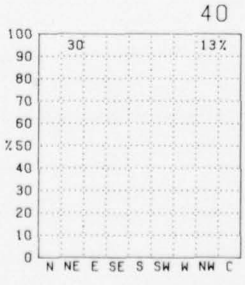


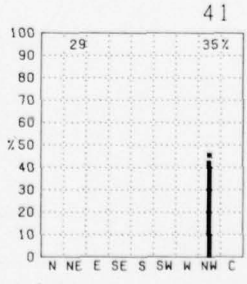
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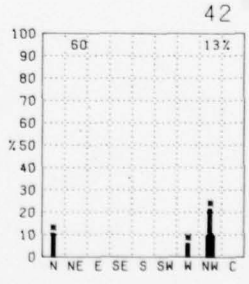
INSUFFICIENT DATA

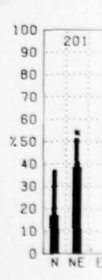






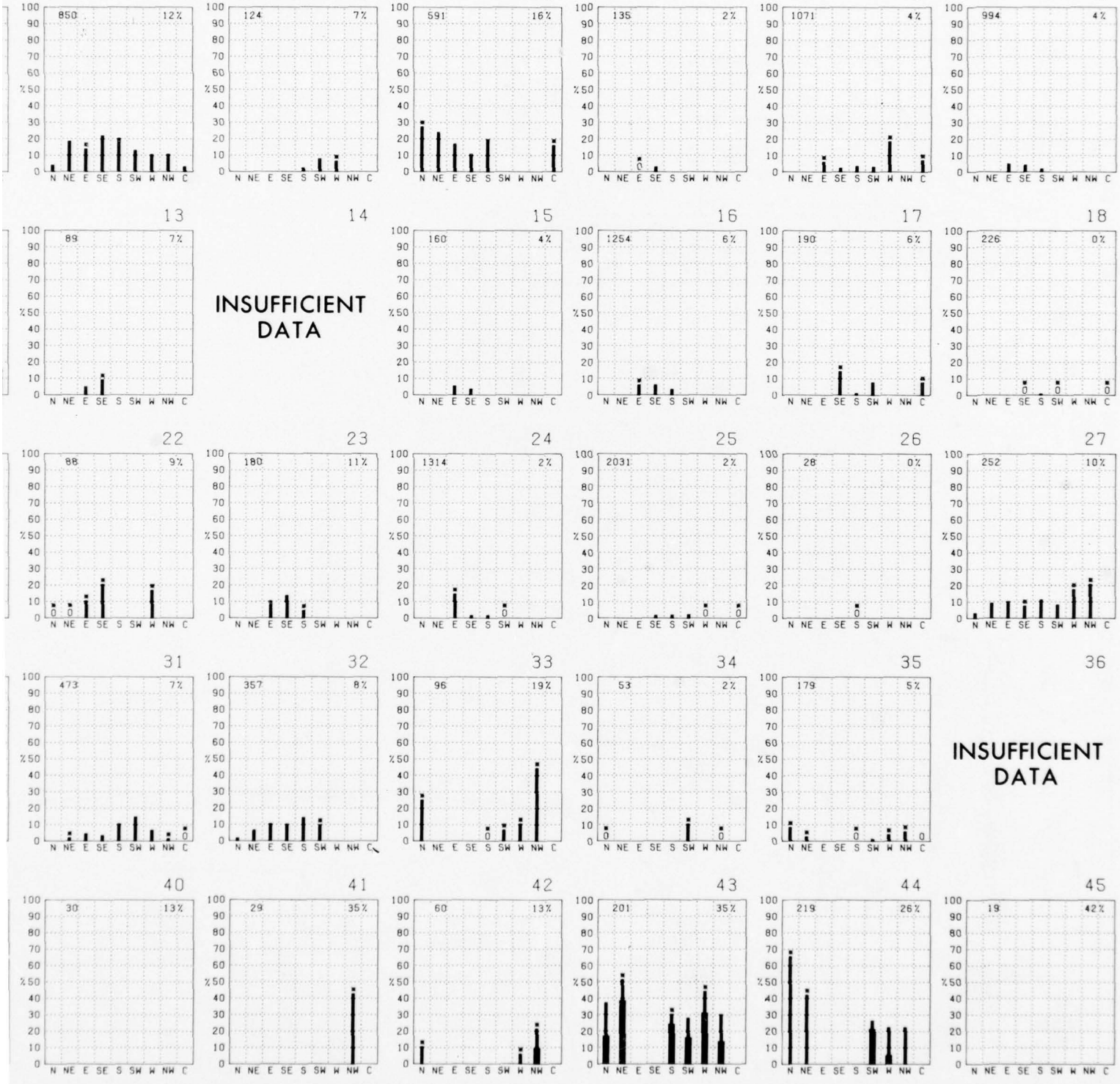






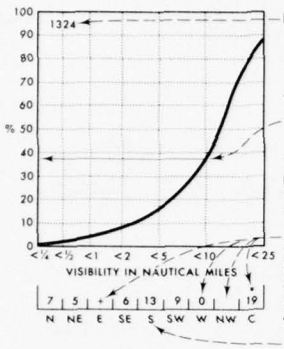
Graphs represent the objective compilation of available data for specified areas without regard to suspected
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was

MARCH



the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

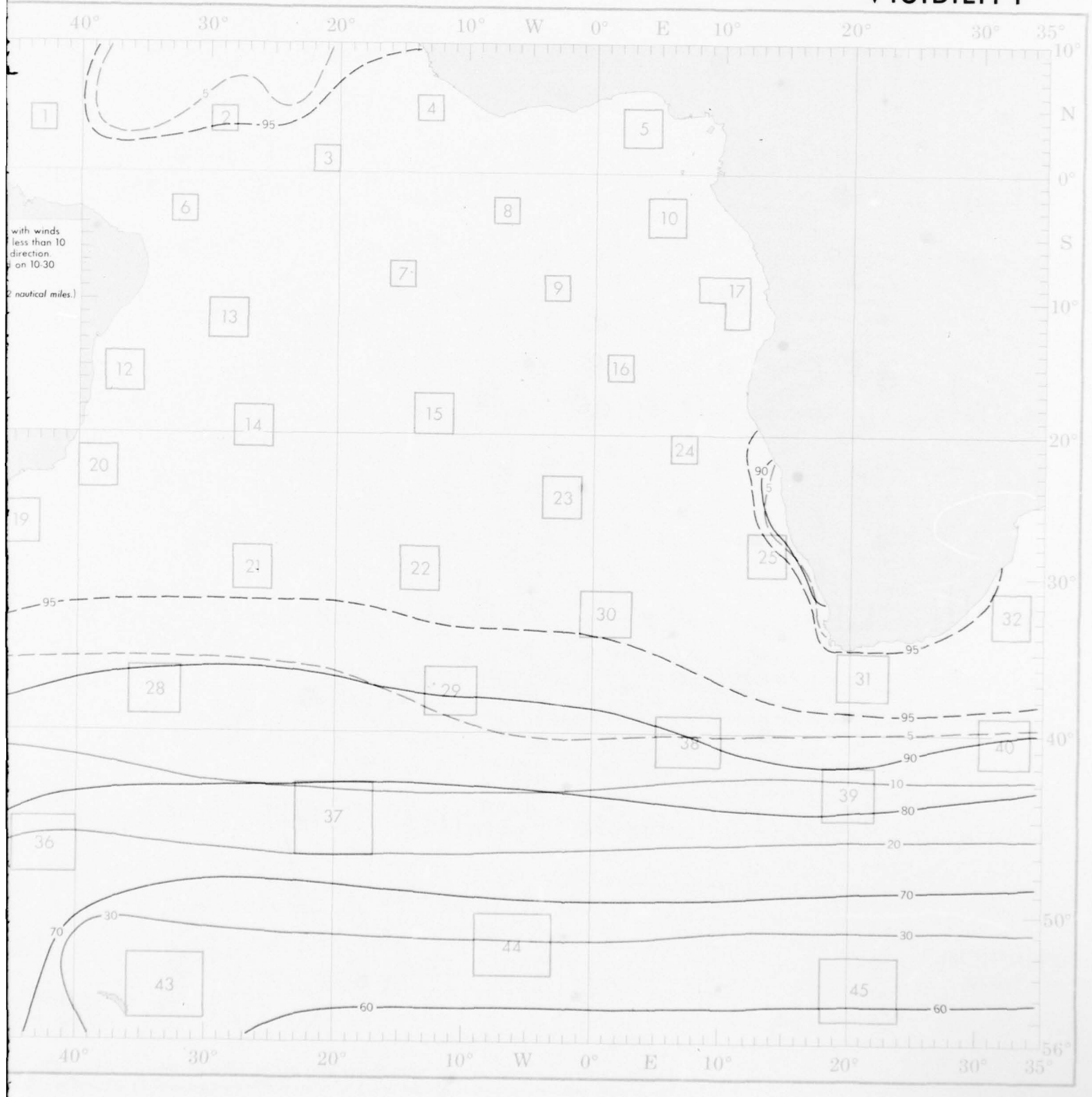
+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

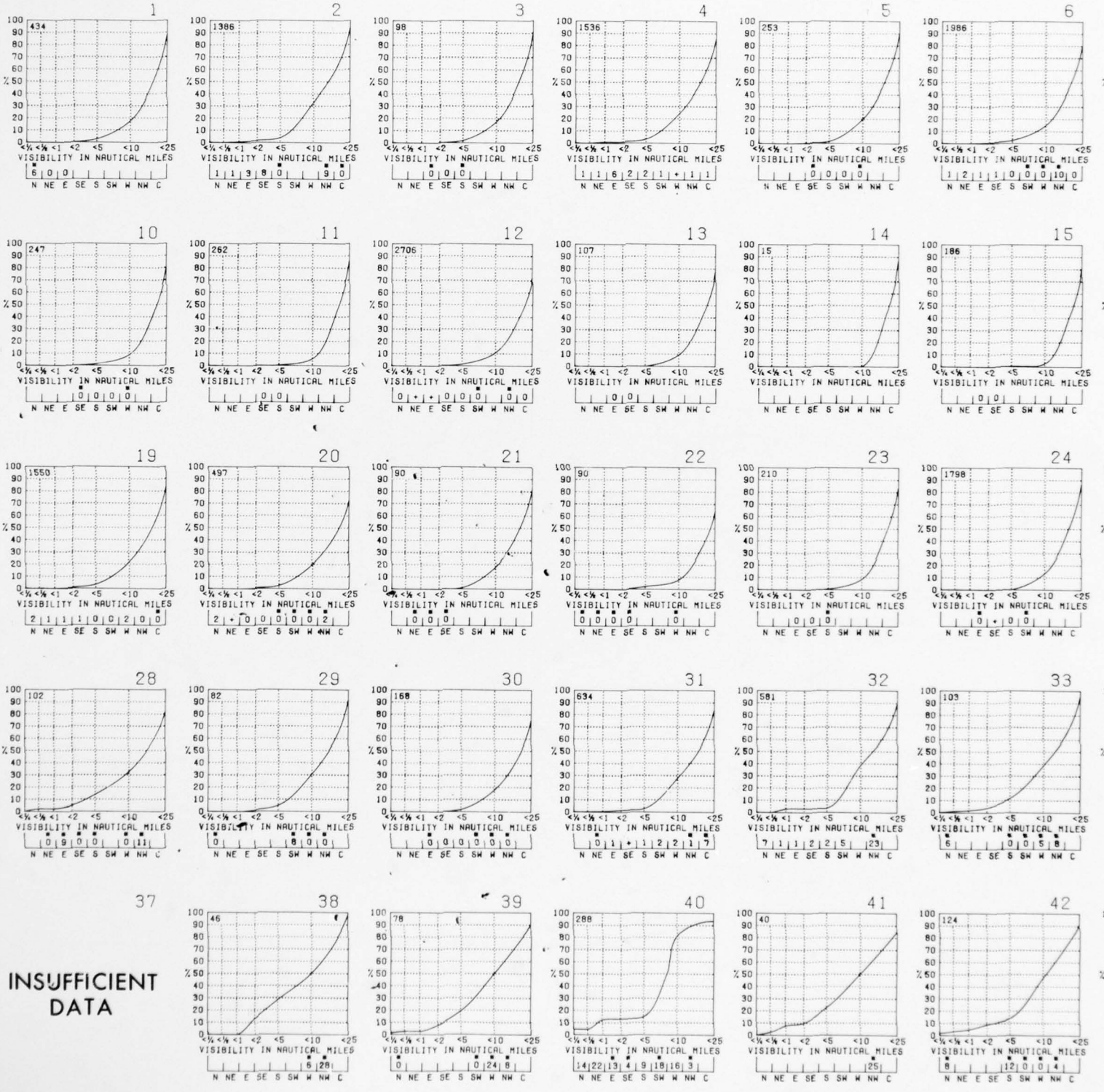
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

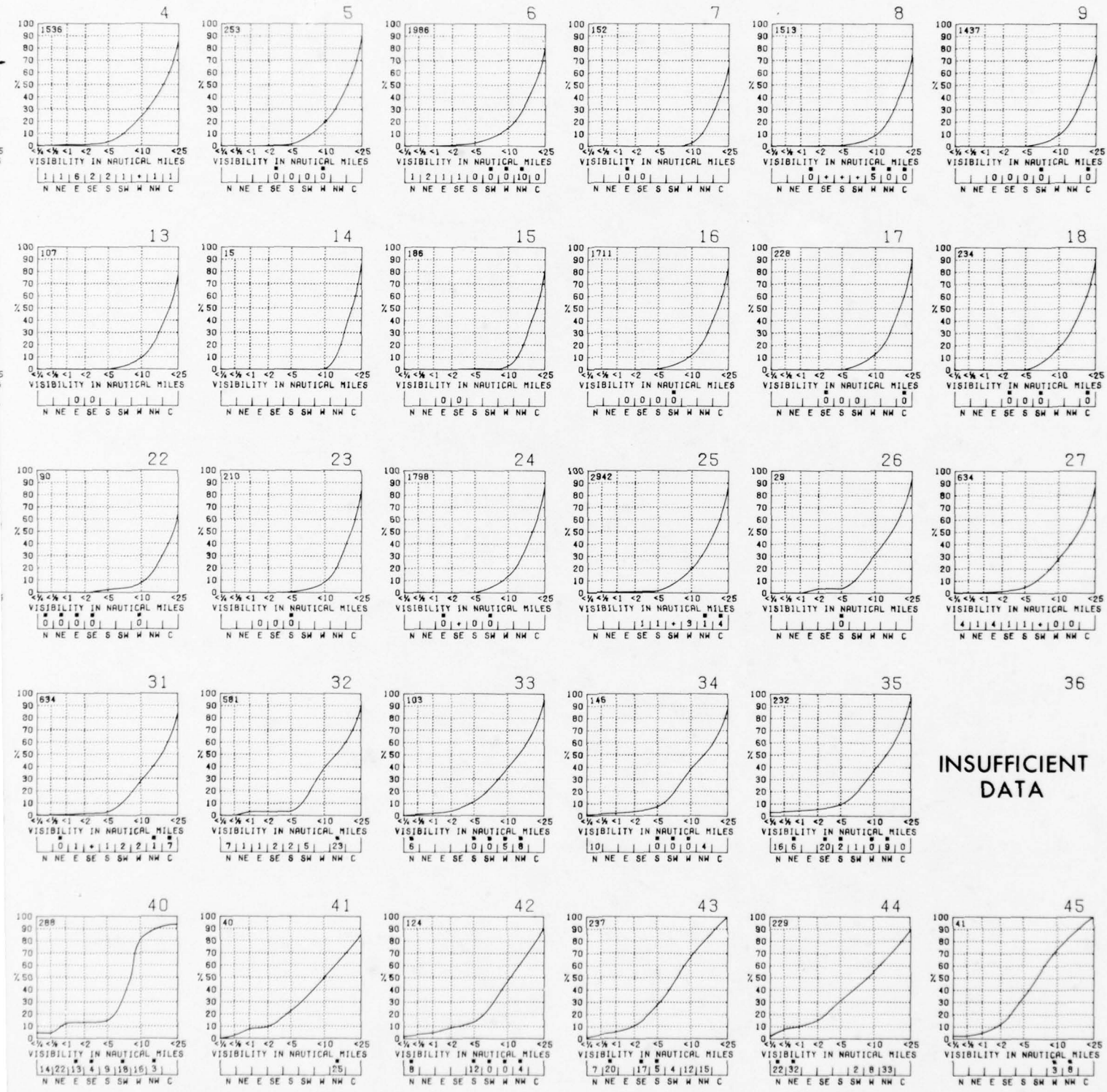

40°
30°
20°
10° W
0°
E 10°
20°
30°
35°
10° N
0°
S 10°
20°
30°
40°
50°
56°
with winds
less than 10
direction
on 10-30
nautical miles.)
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VISIBILITY



Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

MARCH

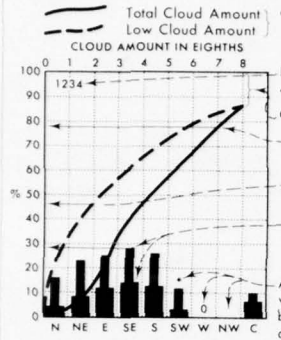


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INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

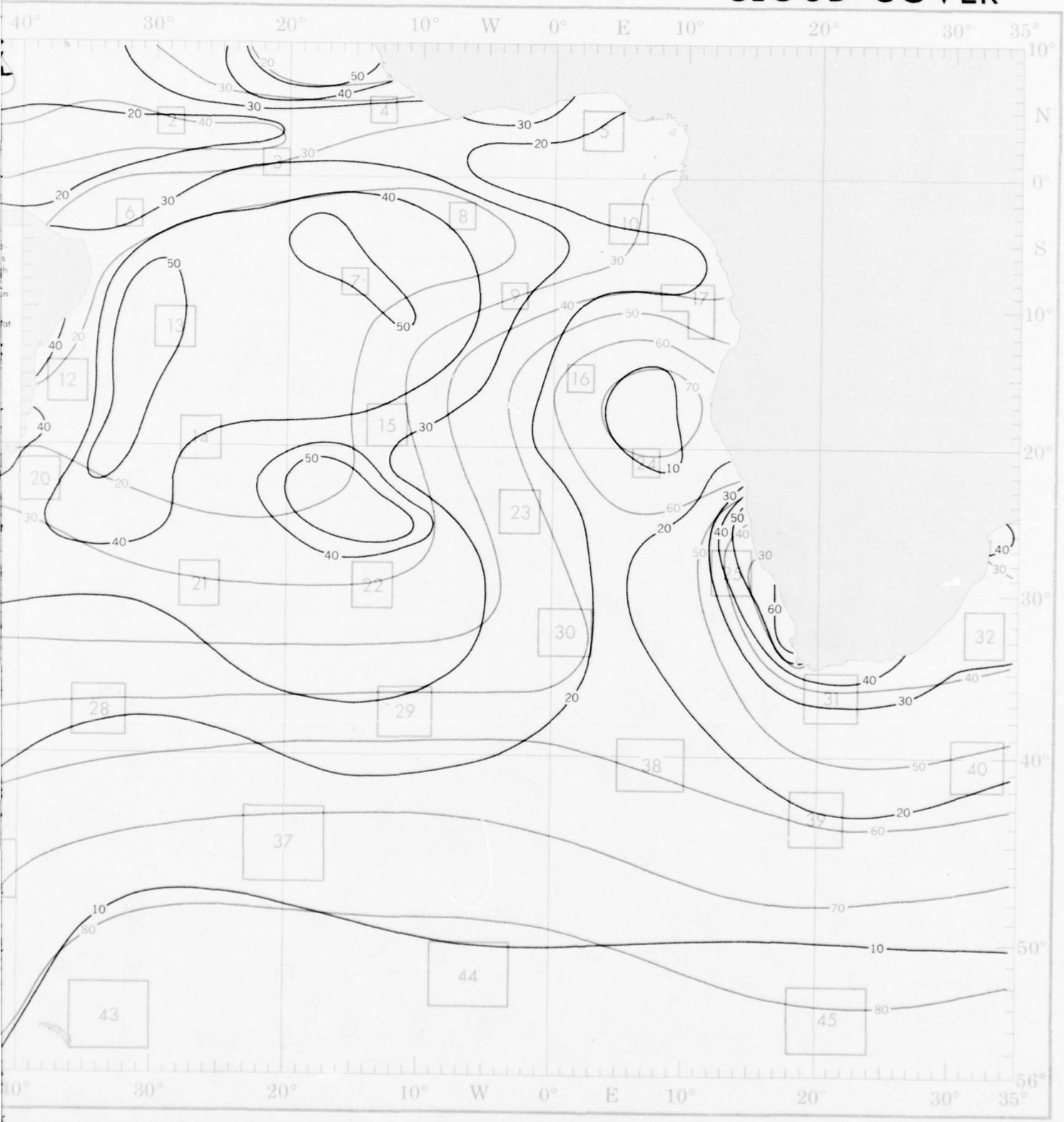
An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

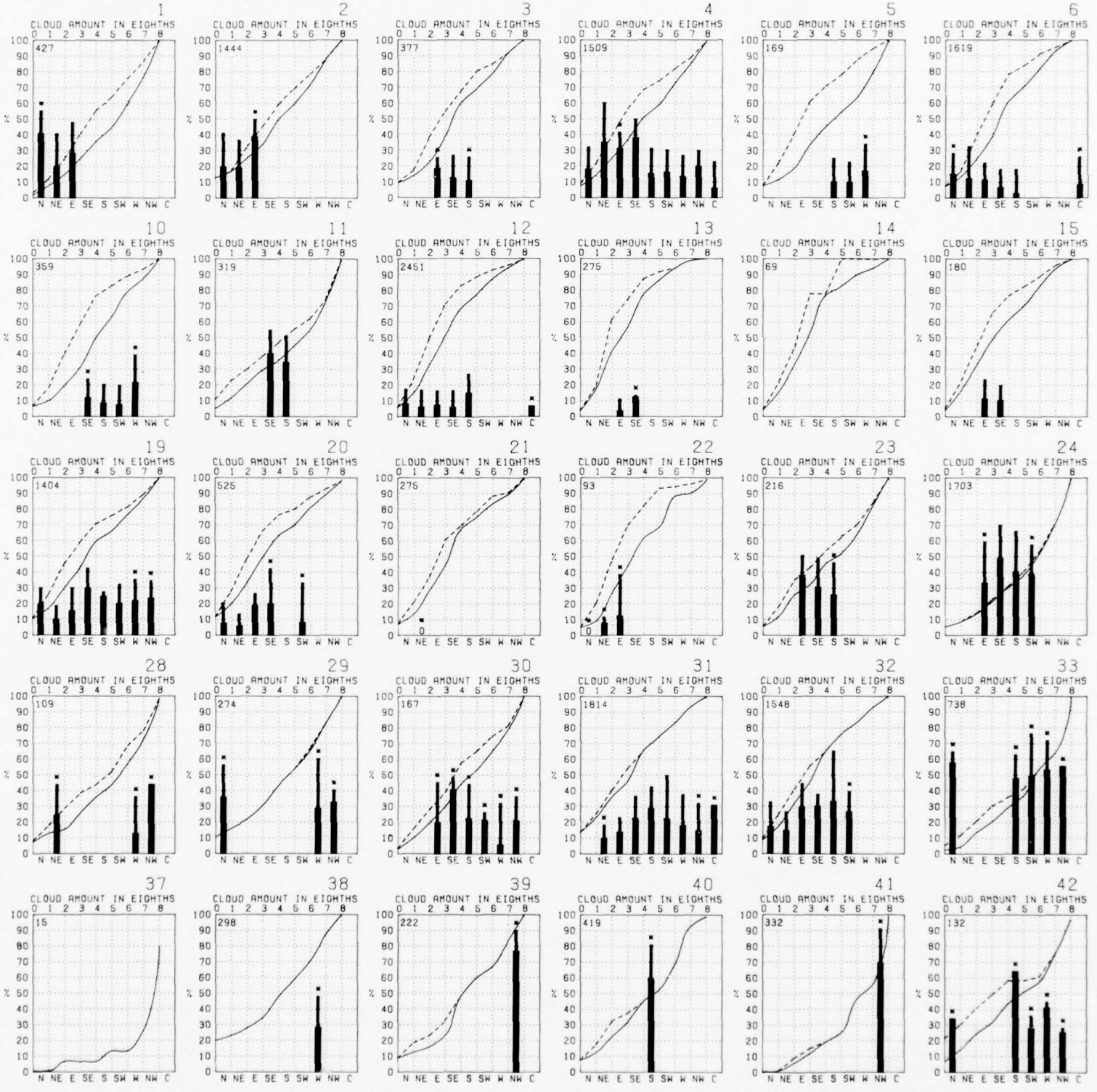
BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

CLOUD COVER

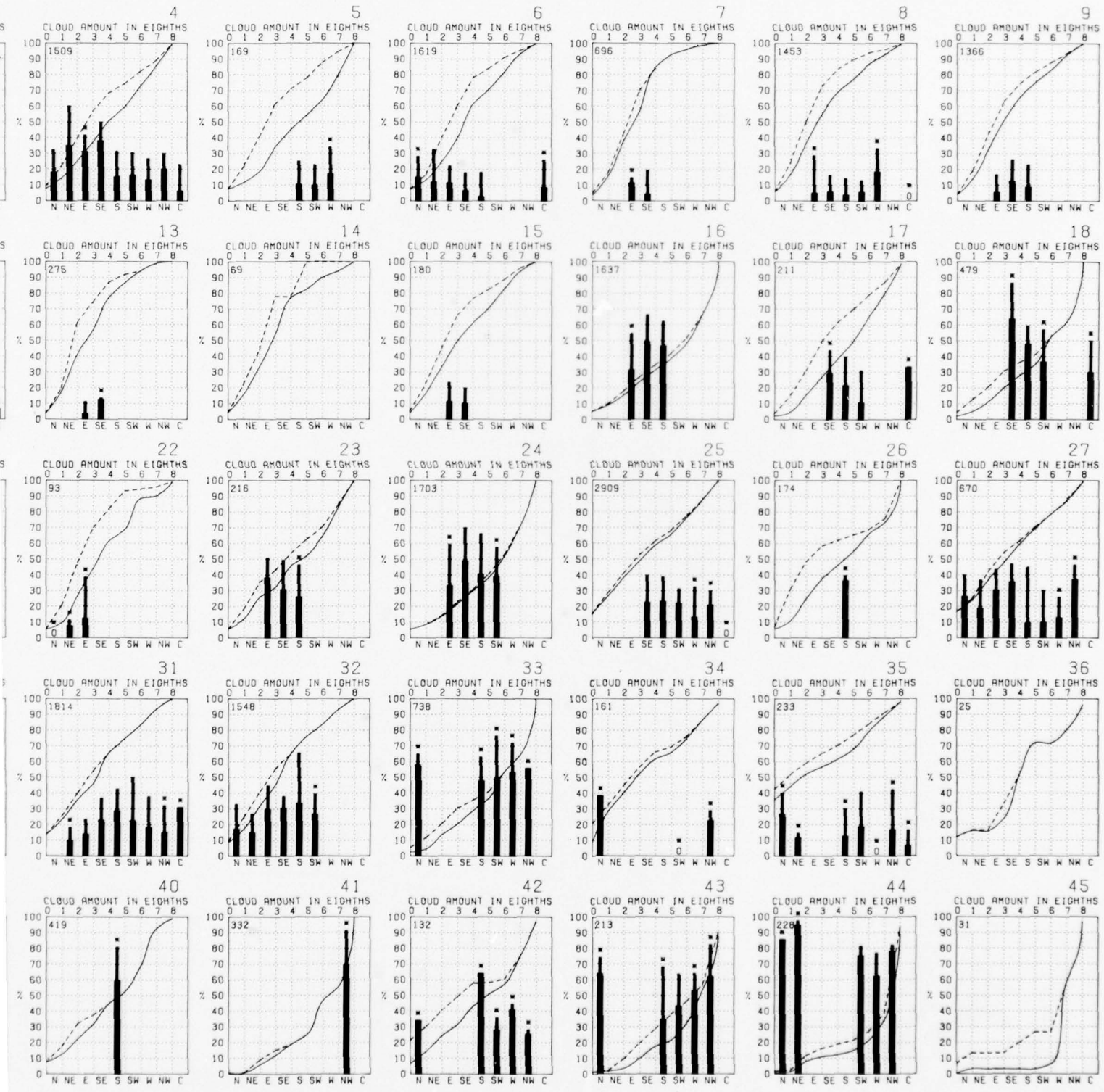

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 37 38 39 40 43 44 45
10 20 30 40 50 60 70 80

CLOUD COVER



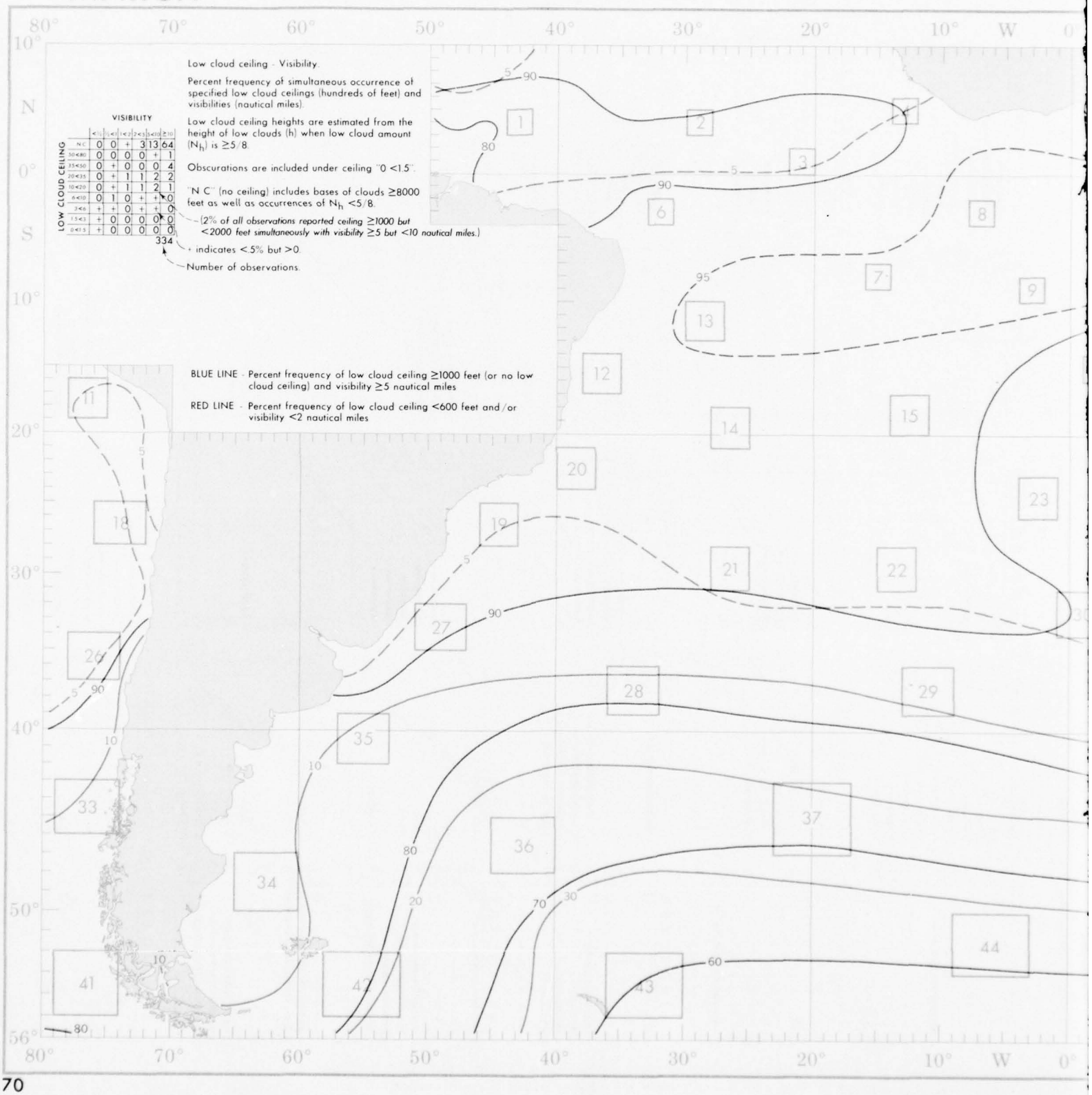
Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

MARCH

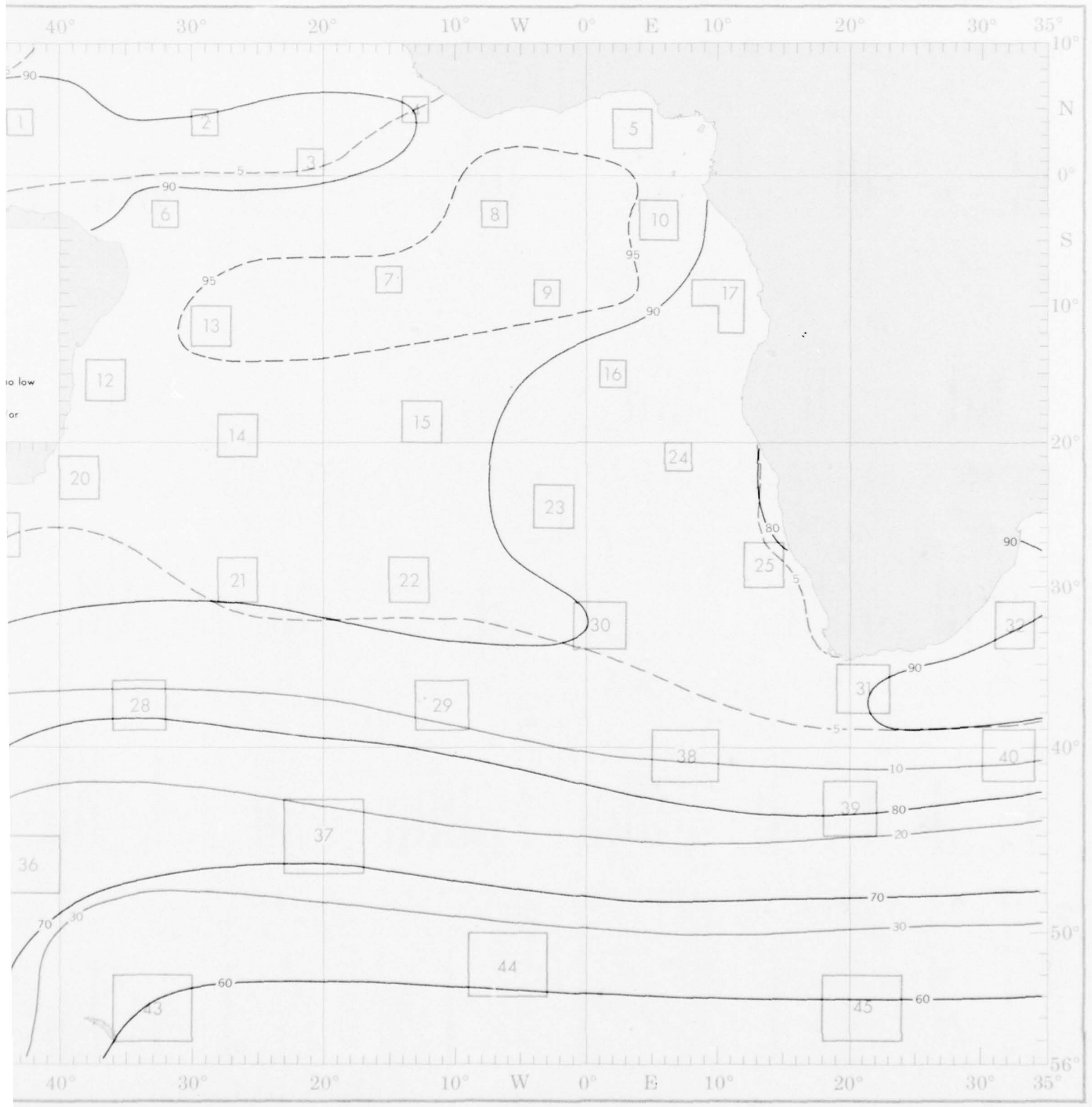


the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates <.5% but >0.
Number of observations.
VISIBILITY
LOW CLOUD CEILING
N C 0 0 + 3 13 64
50<80 0 0 0 0 + 1
35<50 0 + 0 0 0 4
20<35 0 + 1 1 2 2
10<20 0 + 1 1 2 1
6<10 0 1 0 + + 0
3<6 + + 0 + + 0
1.5<3 + 0 0 0 0 0
0<1.5 + 0 0 0 0 0
334
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 6 7 8 9 11 12 13 14 15 18 19 20 21 22 23 26 27 28 29 33 34 35 36 37 41 42 43 44
5 90 80 95 10 20 30 70 60

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	53
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	1
20<35	0	0	+	0	1	3
10<20	0	0	0	1	4	17
6<10	0	0	0	1	2	9
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

339

2

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	54
50<80	0	0	0	0	1	1
35<50	0	0	0	+	1	3
20<35	0	0	0	0	1	6
10<20	0	0	0	+	1	15
6<10	0	0	0	1	2	5
3<6	0	0	0	0	+	2
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	1

404

3

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	1	66
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	4	0
10<20	0	0	0	0	0	7
6<10	0	0	0	0	4	7
3<6	0	0	0	0	2	5
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

82

4

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	6	54
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	2
20<35	0	0	0	+	1	6
10<20	0	0	0	1	3	7
6<10	0	0	0	+	2	4
3<6	+	0	0	+	+	+
1.5<3	0	0	0	+	0	+
0<1.5	+	0	0	+	0	+

995

5

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	67
50<80	0	0	0	0	0	3
35<50	0	0	0	0	2	1
20<35	0	0	0	0	3	4
10<20	0	0	0	0	1	10
6<10	0	0	1	0	1	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

112

6

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	2	75
50<80	0	0	0	0	0	+
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	2
10<20	0	0	0	+	1	8
6<10	0	0	0	+	1	4
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

653

10

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	72
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	0	1	+	5
10<20	0	0	0	+	1	7
6<10	0	0	0	0	+	5
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

209

11

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	47
50<80	0	0	0	0	1	+
35<50	0	0	0	0	+	6
20<35	0	0	0	0	2	13
10<20	0	0	0	0	+	18
6<10	0	0	0	0	1	8
3<6	0	0	0	+	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

225

12

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	81
50<80	0	0	0	0	0	1
35<50	0	0	0	+	+	2
20<35	0	0	0	+	1	3
10<20	0	0	0	+	1	5
6<10	0	0	0	+	1	3
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	+	+	0	+

1395

13

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	86
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	4
6<10	0	0	0	0	0	1
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

83

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	77
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	1
10<20	0	0	0	1	1	13
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

151

19

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	66
50<80	0	0	0	0	0	2
35<50	0	0	0	+	2	2
20<35	0	0	+	1	3	4
10<20	0	0	+	+	1	5
6<10	0	0	0	+	1	4
3<6	0	0	+	0	+	1
1.5<3	0	0	0	+	0	0
0<1.5	0	0	0	0	0	+

527

20

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	4	71
50<80	0	0	0	0	1	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	+	5
10<20	0	0	0	1	1	5
6<10	0	0	0	0	2	3
3<6	0	0	0	+	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	+	0	+	0

236

21

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	2	68
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	2	5
10<20	0	0	0	0	5	15
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

41

22

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	79
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	4
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

67

23

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	0	2	23
6<10	0	0	0	0	2	11
3<6	0	0	0	0	2	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

177

24

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	30
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	7
20<35	0	0	0	0	1	16
10<20	0	0	0	0	3	27
6<10	0	0	0	0	2	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1378

28

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	0	44
50<80	0	0	0	0	2	3
35<50	0	0	2	0	0	8
20<35	0	0	0	0	2	11
10<20	0	0	2	2	0	9
6<10	0	0	0	2	2	0
3<6	2	0	2	0	2	2
1.5<3	0	0	0	2	0	0
0<1.5	2	0	0	0	0	3

66

29

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	37
50<80	0	0	0	0	0	8
35<50	0	0	0	0	0	6
20<35	0	0	0	0	0	12
10<20	0	0	0	4	12	10
6<10	0	0	0	2	0	2
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	1
0<1.5	0	0	2	0	0	0

49

30

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	1	57
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	3
20<35	0	0	0	0	1	7
10<20	0	0	0	0	3	17
6<10	0	0	0	0	1	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	1	1
0<1.5	0	0	0	0	0	0

111

31

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	+	0	4	62
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	2
20<35	0	0	0	0	2	7
10<20	0	0	0	+	3	10
6<10	0	0	+	1	2	3
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

362

32

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	59
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	1
20<35	0	0	0	0	1	6
10<20	0	0	0	+	4	14
6<10	0	0	+	0	2	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	+	0

330

33

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	10	27
50<80	0	0	0	0	0	0
35<50	0	0	0	1	0	1
20<35	0	0	0	2	2	8
10<20	0	0	0	2	7	16
6<10	0	0	0	0	3	6
3<6	0	1	0	1	1	5
1.5<3	0	0	1	1	0	0
0<1.5	1	0	1	0	0	0

88

37

INSUFFICIENT DATA

38

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	14	34
50<80	0	0	0	0	0	0
35<50	0	0	0	0	3	0
20<35	0	0	0	0	3	24
10<20	0	0	0	0	0	14
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	3
1.5<3	0	0	0	3	0	0
0<1.5	0	0	0	0	0	0

29

39

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	33
50<80	0	0	0	0	3	0
35<50	0	0	0	0	0	8
20<35	0	0	0	0	10	10
10<20	0	0	0	0	3	10
6<10	0	0	0	5	0	3
3<6	0	0	0	0	5	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

39

40

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	44
50<80	0	0	0	0	0	6
35<50	0	0	0	3	0	3
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	19
6<10	0	0	0	0	6	9
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

32

41

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	15
50<80	0	0	0	0	0	0
35<50	0	0	0	0	6	0
20<35	0	0	0	0	0	27
10<20	0	0	3	6	12	3
6<10	0	0	0	9	3	0
3<6	0	3	0	0	0	6
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	3	0

33

42

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	1	1	0	5	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	1
10<20	1	0	0	0	6	15
6<10	1	0	1	0	4	1
3<6	0	0	0	1	0	1
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	1	0

79

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

MARCH

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	6	64
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	2
20<35	0	0	0	+	1	6
10<20	0	0	0	1	3	7
6<10	0	0	0	+	2	4
3<6	+	0	0	+	+	+
1.5<3	0	0	0	+	0	+
0<1.5	+	0	0	+	0	+

995

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	67
50<80	0	0	0	0	0	3
35<50	0	0	0	0	2	1
20<35	0	0	0	0	3	4
10<20	0	0	0	0	1	10
6<10	0	0	1	0	1	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

112

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	2	75
50<80	0	0	0	0	0	+
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	2
10<20	0	0	0	+	1	8
6<10	0	0	0	0	1	4
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

653

7

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	82
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	5
10<20	0	0	0	0	0	10
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

125

8

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	0	2	82
50<80	0	0	0	0	0	+
35<50	0	0	0	0	+	1
20<35	0	0	0	0	1	4
10<20	0	0	+	+	1	7
6<10	0	0	0	+	+	2
3<6	0	0	+	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1143

9

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	73
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	3
20<35	0	0	0	0	+	7
10<20	0	0	0	0	1	9
6<10	0	0	0	+	1	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	+	0	0

1068

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	86
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	4
6<10	0	0	0	0	0	1
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

83

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	77
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	1
10<20	0	0	0	1	1	13
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

151

16

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	35
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	5
20<35	0	0	0	+	1	15
10<20	0	0	0	0	2	27
6<10	0	0	0	0	1	9
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	+	0	+

1314

17

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	59
50<80	0	0	0	0	2	1
35<50	0	0	0	0	1	1
20<35	0	0	0	0	2	11
10<20	0	0	0	0	3	13
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	1

181

18

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	31
50<80	0	0	0	0	+	+
35<50	0	0	0	0	3	3
20<35	0	0	0	0	2	17
10<20	0	0	0	0	5	17
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

214

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	79
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	4
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

67

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	0	2	23
6<10	0	0	0	0	2	11
3<6	0	0	0	0	2	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

177

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	30
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	7
20<35	0	0	0	0	1	16
10<20	0	0	0	0	3	27
6<10	0	0	0	0	2	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1378

25

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	+	+	+	6	56
50<80	0	0	0	+	1	1
35<50	0	0	0	0	+	3
20<35	0	0	0	0	1	7
10<20	0	0	0	+	2	14
6<10	0	0	+	+	1	6
3<6	0	0	0	+	1	+
1.5<3	+	+	+	+	+	+
0<1.5	0	0	0	0	0	0

2152

26

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	24	38
50<80	0	0	0	0	0	3
35<50	0	0	0	0	3	0
20<35	0	0	0	0	0	14
10<20	0	0	0	0	0	14
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	3	0	0	0

29

27

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	0	5	57
50<80	0	0	0	0	+	2
35<50	0	0	0	1	2	2
20<35	0	0	0	1	3	8
10<20	0	0	+	+	2	8
6<10	0	0	0	+	2	2
3<6	0	0	0	0	+	2
1.5<3	0	0	0	0	0	0
0<1.5	+	0	0	+	0	0

255

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	0	4	62
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	2
20<35	0	0	0	0	2	7
10<20	0	0	0	+	3	10
6<10	0	0	+	1	2	3
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

362

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	59
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	1
20<35	0	0	0	0	1	6
10<20	0	0	0	+	4	14
6<10	0	0	0	+	2	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	+	0	0

330

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	10	27
50<80	0	0	0	0	0	0
35<50	0	0	0	1	0	1
20<35	0	0	0	2	2	8
10<20	0	0	0	2	7	16
6<10	0	0	0	0	3	6
3<6	0	1	0	1	1	5
1.5<3	0	0	1	1	0	0
0<1.5	1	0	1	0	0	0

88

34

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	5	64
50<80	0	0	0	0	2	4
35<50	0	0	0	0	0	0
20<35	0	0	0	0	2	4
10<20	0	0	2	0	2	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	0	0	0

56

35

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	1	10	61
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	3	7
10<20	0	0	0	1	3	4
6<10	0	0	0	1	1	1
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	0	0	0

163

36

INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	44
50<80	0	0	0	0	0	6
35<50	0	0	0	3	0	3
20<35	0	0	0	0	0	6
10<20	0	0	0	0	0	19
6<10	0	0	0	0	6	9
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

32

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	15
50<80	0	0	0	0	0	0
35<50	0	0	0	0	6	0
20<35	0	0	0	0	0	27
10<20	0	0	3	6	12	3
6<10	0	0	0	9	3	0
3<6	0	3	0	0	0	6
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	3	0

33

42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	1	1	0	5	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	1
10<20	1	0	0	0	6	15
6<10	1	0	1	0	4	1
3<6	0	0	0	1	0	1
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	1	0

79

43

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	10	21
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	1	0	1	5	7
10<20	1	1	1	6	16	2
6<10	0	1	2	5	3	1
3<6	0	0	0	0	1	0
1.5<3	1	0	0	0	0	0
0<1.5	2	1	2	5	2	0

177

44

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	5	13
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	6
20<35	0	0	0	1	4	15
10<20	0	+	1	9	13	10
6<10	0	+	1	3	1	0
3<6	0	1	2	+	0	0
1.5<3	0	+	1	+	1	0
0<1.5	7	0	0	0	0	+

228

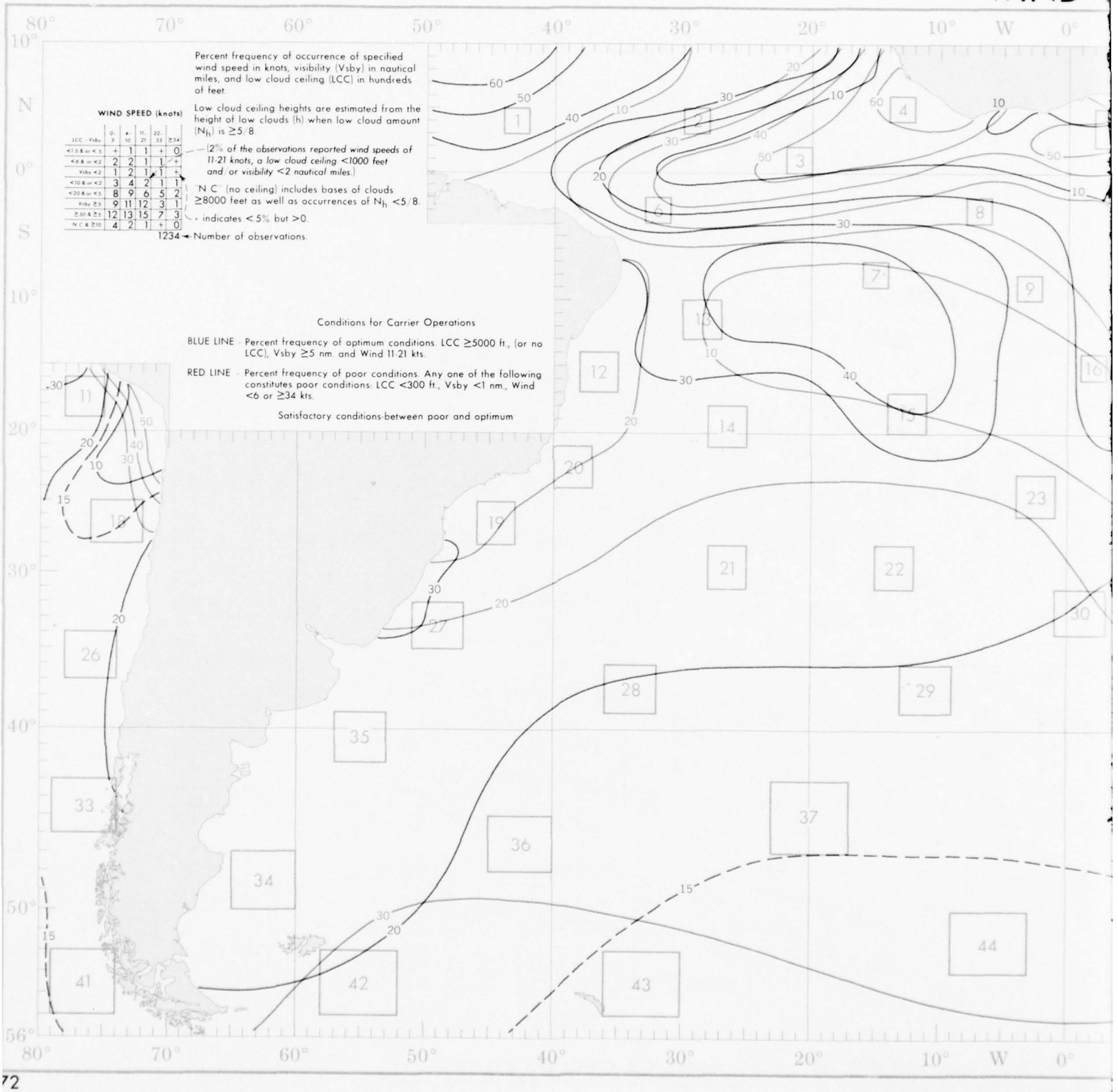
45

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	13
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	7
20<35	0	0	0	0	7	7
10<20	0	0	0	0	13	7
6<10	0	0	0	0	13	0
3<6	0	0	0	7	0	7
1.5<3	0	0	0	0	0	0
0<1.5	0	0	7	0	0	0

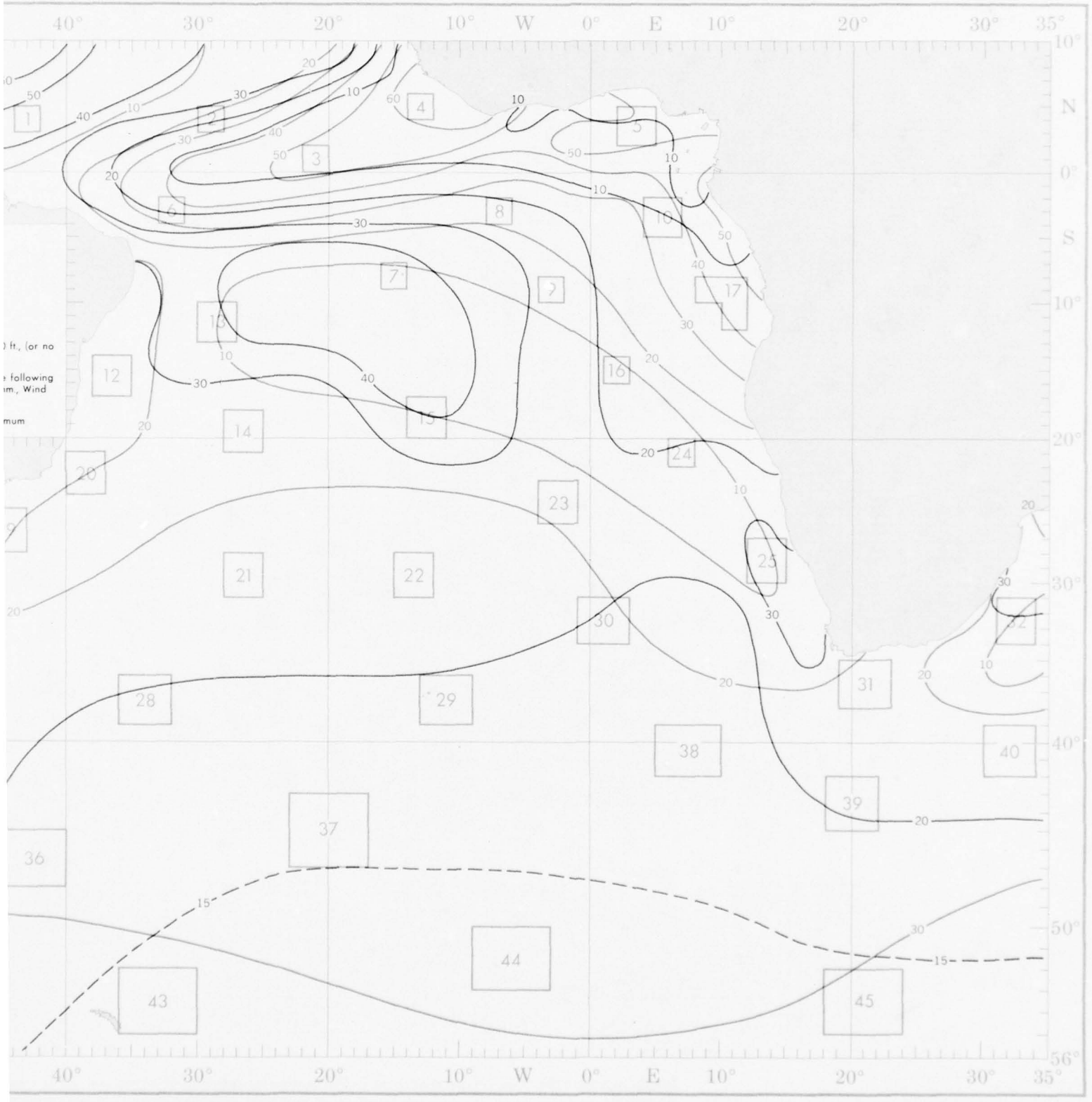
15

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH


80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
1
2
3
4
6
7
8
9
10
11
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44
60
50
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30
20
10
15
Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
WIND SPEED (knots)
LCC - Vsby
0-3
4-10
11-21
22-33
≥34
<1.5 & or <.5
<6 & or <2
Vsby <2
<10 & or <2
<20 & or <5
Vsby ≥5
≥30 & ≥5
N.C. & ≥10
+ 1 1 + 0
2 2 1 1 +
1 2 1 1 +
3 4 2 1 1
8 9 6 5 2
9 11 12 3 1
12 13 15 7 3
4 2 1 + 0
1234
(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)
"N.C." (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
+ indicates <.5% but >0.
Number of observations.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions. LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions-between poor and optimum

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	3	11	+	0
<20 & OR <5	0	8	26	3	0
VSBY ≥5	+	21	72	5	+
≥50 & ≥5	+	13	42	3	+
NC & ≥10	+	12	39	2	+

337

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	+	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	3	0	0
<20 & OR <5	2	16	8	+	0
VSBY ≥5	6	57	36	1	0
≥50 & ≥5	3	36	23	1	0
NC & ≥10	3	30	21	1	0

399

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	5	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	4	9	6	0	0
<20 & OR <5	5	16	6	0	0
VSBY ≥5	27	60	12	0	0
≥50 & ≥5	21	44	4	0	0
NC & ≥10	20	44	2	0	0

82

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	4	2	0	0
<20 & OR <5	6	10	3	0	0
VSBY ≥5	35	56	7	+	0
≥50 & ≥5	26	41	4	+	0
NC & ≥10	23	38	3	+	0

950

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	1	2	3	1	0
<20 & OR <5	2	12	3	1	0
VSBY ≥5	14	68	16	0	0
≥50 & ≥5	12	52	10	0	0
NC & ≥10	11	47	9	0	0

111

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	3	2	+	0
<20 & OR <5	3	10	4	+	0
VSBY ≥5	13	60	26	+	0
≥50 & ≥5	10	48	20	+	0
NC & ≥10	9	46	20	+	0

844

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	1	0	0
<20 & OR <5	+	12	3	0	0
VSBY ≥5	12	72	14	0	0
≥50 & ≥5	11	57	10	0	0
NC & ≥10	10	53	10	0	0

208

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	6	4	0	0
<20 & OR <5	1	16	13	0	0
VSBY ≥5	3	45	52	0	0
≥50 & ≥5	1	25	22	0	0
NC & ≥10	1	24	21	0	0

294

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	2	+	0
<20 & OR <5	+	6	4	+	0
VSBY ≥5	6	66	27	1	0
≥50 & ≥5	5	57	20	+	0
NC & ≥10	5	56	20	+	0

1383

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	1	0
<20 & OR <5	0	2	1	1	0
VSBY ≥5	1	57	37	5	0
≥50 & ≥5	1	49	34	4	0
NC & ≥10	1	49	31	4	0

83

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	0	0
<20 & OR <5	0	11	11	0	0
VSBY ≥5	1	40	55	3	0
≥50 & ≥5	1	30	43	3	0
NC & ≥10	1	30	43	3	0

151

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	+	0
<6 & OR <2	0	1	2	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	3	4	1	+
<20 & OR <5	1	4	8	2	+
VSBY ≥5	6	43	46	3	+
≥50 & ≥5	5	36	31	1	0
NC & ≥10	4	33	28	1	0

521

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	+	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	3	3	1	0
<20 & OR <5	+	8	6	1	0
VSBY ≥5	3	47	42	4	0
≥50 & ≥5	3	38	36	2	0
NC & ≥10	3	36	31	2	0

228

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	0	13	10	0
VSBY ≥5	8	31	33	23	3
≥50 & ≥5	8	28	21	10	3
NC & ≥10	8	28	21	8	3

39

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	1	0	0
<20 & OR <5	0	7	3	0	0
VSBY ≥5	9	55	34	1	0
≥50 & ≥5	9	42	31	1	0
NC & ≥10	9	39	30	1	0

67

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	1	1	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	3	0
<20 & OR <5	1	10	26	3	0
VSBY ≥5	11	37	48	4	0
≥50 & ≥5	9	24	20	1	0
NC & ≥10	9	24	20	1	0

174

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	9	1	0
<20 & OR <5	+	9	30	4	0
VSBY ≥5	1	26	66	7	0
≥50 & ≥5	1	11	20	2	0
NC & ≥10	1	10	19	1	0

1369

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	2	2	3	0	0
<6 & OR <2	2	5	8	2	0
VSBY <2	2	2	5	0	0
<10 & OR <2	2	5	9	2	2
<20 & OR <5	2	9	14	6	2
VSBY ≥5	0	40	34	11	0
≥50 & ≥5	0	26	17	5	0
NC & ≥10	0	23	17	3	0

65

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	0	2	2	0	0
VSBY <2	0	2	0	0	0
<10 & OR <2	0	2	4	2	0
<20 & OR <5	2	2	16	14	0
VSBY ≥5	12	22	45	12	0
≥50 & ≥5	6	18	20	2	0
NC & ≥10	2	14	18	2	0

49

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	5	1	0
<20 & OR <5	4	10	14	3	0
VSBY ≥5	6	45	45	4	0
≥50 & ≥5	1	32	25	1	0
NC & ≥10	1	32	24	1	0

110

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	1	1	0
VSBY <2	+	0	+	+	0
<10 & OR <2	1	1	4	1	+
<20 & OR <5	2	5	10	3	1
VSBY ≥5	8	36	38	15	1
≥50 & ≥5	6	26	24	10	1
NC & ≥10	5	23	23	9	1

359

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	5	2	0
<20 & OR <5	2	9	14	4	1
VSBY ≥5	5	34	47	12	1
≥50 & ≥5	3	23	29	8	+
NC & ≥10	3	22	27	6	+

330

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	2	7	4	0
VSBY <2	0	1	2	1	0
<10 & OR <2	0	7	12	4	0
<20 & OR <5	0	13	27	11	0
VSBY ≥5	1	25	49	11	1
≥50 & ≥5	1	12	20	4	1
NC & ≥10	1	8	13	4	1

85

37

INSUFFICIENT DATA

38

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	3	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	3	3	0
<20 & OR <5	0	0	14	7	0
VSBY ≥5	0	3	59	31	3
≥50 & ≥5	0	3	28	14	3
NC & ≥10	0	3	21	10	0

29

39

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	8	0
VSBY <2	0	0	0	5	0
<10 & OR <2	0	0	5	8	0
<20 & OR <5	0	8	10	10	5
VSBY ≥5	0	36	41	13	3
≥50 & ≥5	0	26	10	3	0
NC & ≥10	0	26	5	3	0

39

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	10	0	0
<20 & OR <5	0	10	16	13	0
VSBY ≥5	6	35	35	19	0
≥50 & ≥5	6	26	13	6	0
NC & ≥10	6	23	13	3	0

31

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	3	0
<6 & OR <2	3	0	3	9	0
VSBY <2	0	0	0	9	0
<10 & OR <2	3	0	9	16	0
<20 & OR <5	3	0	13	31	3
VSBY ≥5	3	0	31	31	9
≥50 & ≥5	0	0	13	3	0
NC & ≥10	0	0	13	3	0

32

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	1	3
<6 & OR <2	1	0	4	4	4
VSBY <2	1	0	3	1	4
<10 & OR <2	1	0	5	8	4
<20 & OR <5	1	4	13	18	4
VSBY ≥5	4	27	36	23	0
≥50 & ≥5	4	21	26	6	0
NC & ≥10	3	21	23	5	0

78

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

SIBILITY-WIND

MARCH

4

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	4	2	0	0
<20 & OR <5	6	10	3	0	0
VSBY ≥5	35	56	7	+	0
≥50 & ≥5	26	41	4	+	0
NC & ≥10	23	38	3	+	0

950

5

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	1	2	3	1	0
<20 & OR <5	2	12	3	1	0
VSBY ≥5	14	68	16	0	0
≥50 & ≥5	12	52	10	0	0
NC & ≥10	11	47	9	0	0

111

6

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	3	2	+	0
<20 & OR <5	3	10	4	+	0
VSBY ≥5	13	60	26	+	0
≥50 & ≥5	10	48	20	+	0
NC & ≥10	9	46	20	+	0

644

7

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	0	6	8	0	0
VSBY ≥5	3	38	58	1	0
≥50 & ≥5	3	30	47	1	0
NC & ≥10	3	30	47	1	0

125

8

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	1	6	4	0	0
VSBY ≥5	6	65	28	+	0
≥50 & ≥5	5	56	23	+	0
NC & ≥10	5	54	22	+	0

1137

9

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	+	0
<6 & OR <2	+	+	0	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	2	+	0
<20 & OR <5	+	6	8	+	0
VSBY ≥5	5	54	40	1	0
≥50 & ≥5	5	43	28	1	0
NC & ≥10	4	41	27	1	0

1065

13

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	1	0
<20 & OR <5	0	2	1	1	0
VSBY ≥5	1	57	37	5	0
≥50 & ≥5	1	49	34	4	0
NC & ≥10	1	49	31	4	0

83

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	0	0
<20 & OR <5	0	11	11	0	0
VSBY ≥5	1	40	55	3	0
≥50 & ≥5	1	30	43	3	0
NC & ≥10	1	30	43	3	0

151

16

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	6	6	+	0
<20 & OR <5	1	18	21	1	0
VSBY ≥5	2	45	51	2	0
≥50 & ≥5	1	18	17	+	0
NC & ≥10	1	17	16	+	0

1303

17

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	1	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	1	0	0
<20 & OR <5	4	12	4	0	0
VSBY ≥5	16	69	16	0	0
≥50 & ≥5	10	45	10	0	0
NC & ≥10	8	42	9	0	0

179

18

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	3	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	9	3	+	0
<20 & OR <5	1	19	14	2	0
VSBY ≥5	9	40	43	8	0
≥50 & ≥5	6	11	16	5	0
NC & ≥10	5	9	13	4	0

214

22

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	1	0	0
<20 & OR <5	0	7	3	0	0
VSBY ≥5	9	55	34	1	0
≥50 & ≥5	9	42	31	1	0
NC & ≥10	9	39	30	1	0

67

23

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	1	1	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	3	0
<20 & OR <5	1	10	26	3	0
VSBY ≥5	11	37	48	4	0
≥50 & ≥5	9	24	20	1	0
NC & ≥10	9	24	20	1	0

174

24

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	9	1	0
<20 & OR <5	+	9	30	4	0
VSBY ≥5	1	26	66	7	0
≥50 & ≥5	1	11	20	2	0
NC & ≥10	1	10	19	1	0

1369

25

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	2	4	2	+
<20 & OR <5	+	6	13	5	+
VSBY ≥5	3	21	49	23	3
≥50 & ≥5	2	14	30	16	2
NC & ≥10	2	12	27	14	1

2140

26

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	3	0	0	0	0
<6 & OR <2	3	0	0	0	0
VSBY <2	3	0	0	0	0
<10 & OR <2	3	0	0	0	0
<20 & OR <5	3	0	0	0	0
VSBY ≥5	7	24	55	7	3
≥50 & ≥5	3	21	34	7	0
NC & ≥10	0	14	24	0	0

29

27

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	+	0
<6 & OR <2	+	0	2	1	+
VSBY <2	+	0	+	+	0
<10 & OR <2	+	2	4	3	+
<20 & OR <5	+	6	9	5	+
VSBY ≥5	6	32	47	9	2
≥50 & ≥5	6	23	32	4	1
NC & ≥10	6	22	27	2	1

247

31

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	1	1	0
VSBY <2	+	0	+	+	0
<10 & OR <2	1	1	4	1	+
<20 & OR <5	2	5	10	3	1
VSBY ≥5	8	36	38	15	1
≥50 & ≥5	6	26	24	10	1
NC & ≥10	5	23	23	9	1

359

32

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	5	2	0
<20 & OR <5	2	9	14	4	1
VSBY ≥5	5	34	47	12	1
≥50 & ≥5	3	23	29	8	+
NC & ≥10	3	22	27	6	+

330

33

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	2	7	4	0
VSBY <2	0	1	2	1	0
<10 & OR <2	0	7	12	4	0
<20 & OR <5	0	13	27	11	0
VSBY ≥5	1	25	49	11	1
≥50 & ≥5	1	12	20	4	1
NC & ≥10	1	8	13	4	1

85

34

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	0	2	2	0	0
VSBY <2	0	2	2	0	0
<10 & OR <2	0	2	2	0	0
<20 & OR <5	0	5	11	4	0
VSBY ≥5	0	42	38	15	0
≥50 & ≥5	0	35	29	11	0
NC & ≥10	0	25	27	11	0

55

35

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	0	0
<6 & OR <2	0	3	1	0	0
VSBY <2	0	3	0	0	0
<10 & OR <2	1	3	1	0	0
<20 & OR <5	2	7	3	2	0
VSBY ≥5	22	40	29	4	0
≥50 & ≥5	19	31	20	3	0
NC & ≥10	14	29	17	1	0

159

36

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	10	0	0
<20 & OR <5	0	10	16	13	0
VSBY ≥5	6	35	35	19	0
≥50 & ≥5	6	26	13	6	0
NC & ≥10	6	23	13	3	0

31

41

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	3	0
<6 & OR <2	3	0	3	9	0
VSBY <2	0	0	0	9	0
<10 & OR <2	3	0	9	16	0
<20 & OR <5	3	0	13	31	3
VSBY ≥5	3	0	31	31	9
≥50 & ≥5	0	0	13	3	0
NC & ≥10	0	0	13	3	0

32

42

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	1	3
<6 & OR <2	1	0	4	4	4
VSBY <2	1	0	3	1	4
<10 & OR <2	1	0	5	8	4
<20 & OR <5	1	4	13	18	4
VSBY ≥5	4	27	36	23	0
≥50 & ≥5	4	21	26	6	0
NC & ≥10	3	21	23	5	0

78

43

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	2	5	4	3	1
<6 & OR <2	2	5	5	6	1
VSBY <2	2	2	2	4	1
<10 & OR <2	2	7	9	7	2
<20 & OR <5	3	13	15	17	6
VSBY ≥5	2	15	22	27	5
≥50 & ≥5	1	6	11	12	1
NC & ≥10	1	4	7	9	0

175

44

WIND SPEED (KNOTS)

LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	3	3	+
<6 & OR <2	0	+	5	7	4
VSBY <2	0	+	5	6	3
<10 & OR <2	0	+	6	9	4
<20 & OR <5	0	1	11	32	11
VSBY ≥5	+	1	26	31	11
≥50 & ≥5	+	+	7	8	4
NC & ≥10	+	+	6	5	2

218

45

WIND SPEED (KNOTS)

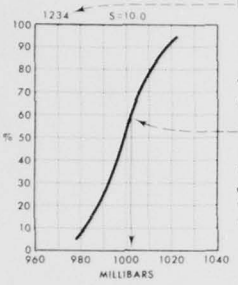
LCC ~ VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	7	0
<6 & OR <2	0	0	7	20	0
VSBY <2	0	0	7	7	0
<10 & OR <2	0	0	7	27	7
<20 & OR <5	0	0	7	47	7
VSBY ≥5	0	0	0	73	13
≥50 & ≥5	0	0	0	20	0
NC & ≥10	0	0	0	13	0

15

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH

SEA LEVEL PRESS



Sea level pressure and mean wind.

Number of observations.

Cumulative percent frequency of sea level pressures equal to or less than the pressure intersected by the curve.

S Standard deviation of pressure (mbs).

(60% of all observed sea level pressures were ≤1002 millibars.)

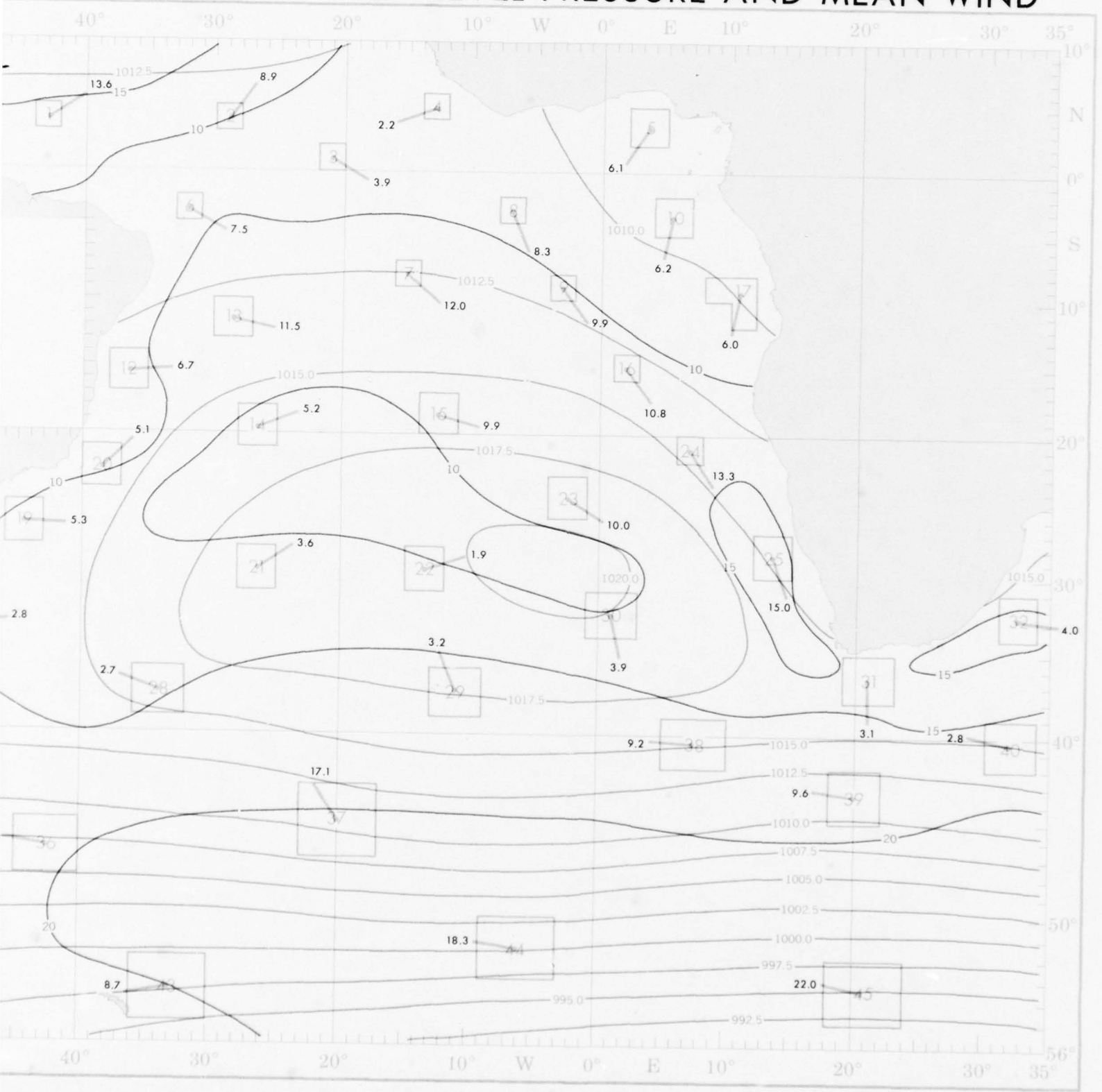
Vector mean wind is plotted from the direction which the mean flow occurs with the magnitude in knots at the end of the vector.

10.2 Vector mean wind is from the northeast at 10.2 knots.

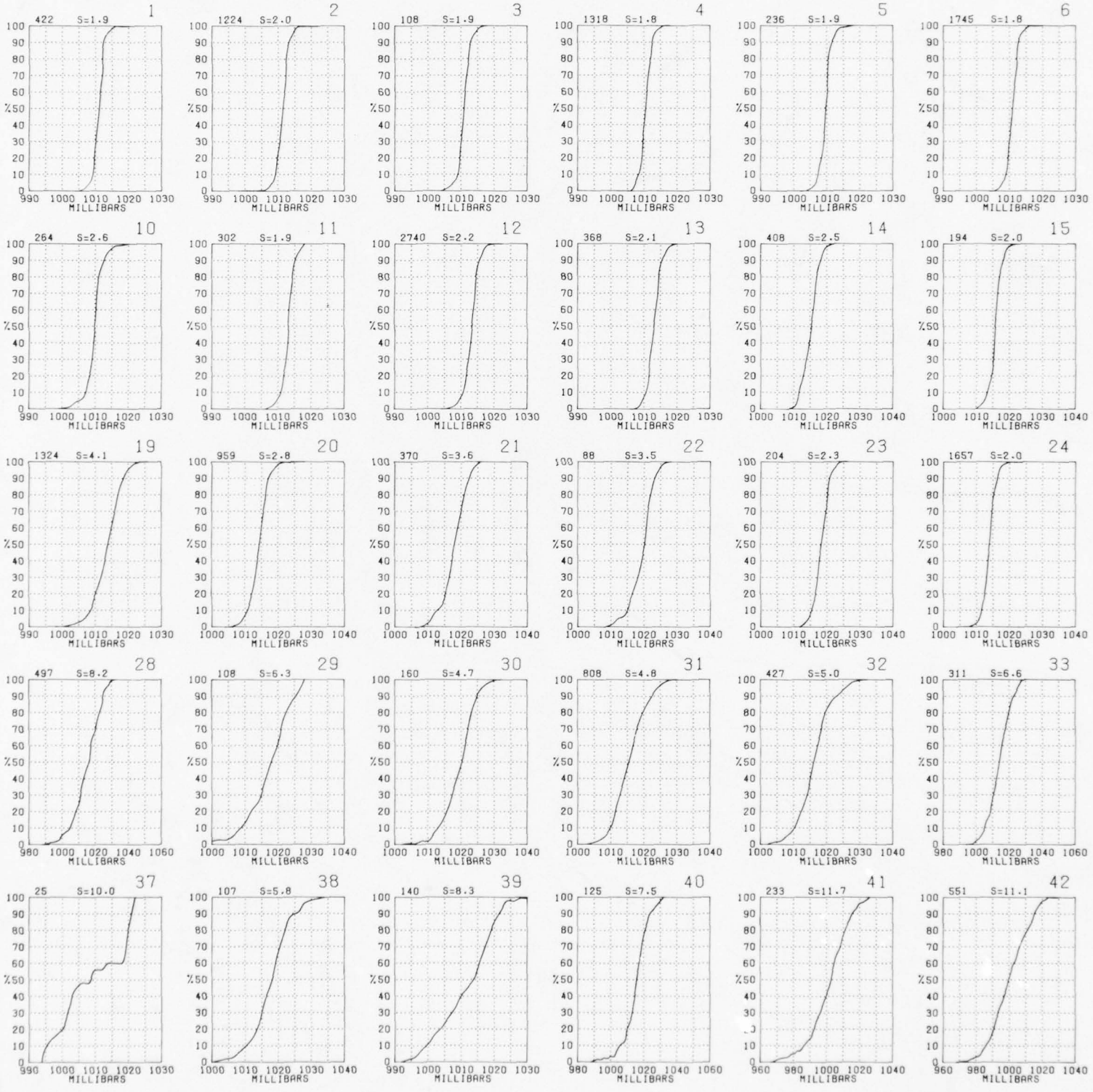
BLUE LINE - Scalar mean wind speed (kts.)

RED LINE - Mean sea level pressure (mbs.)

SEA LEVEL PRESSURE AND MEAN WIND

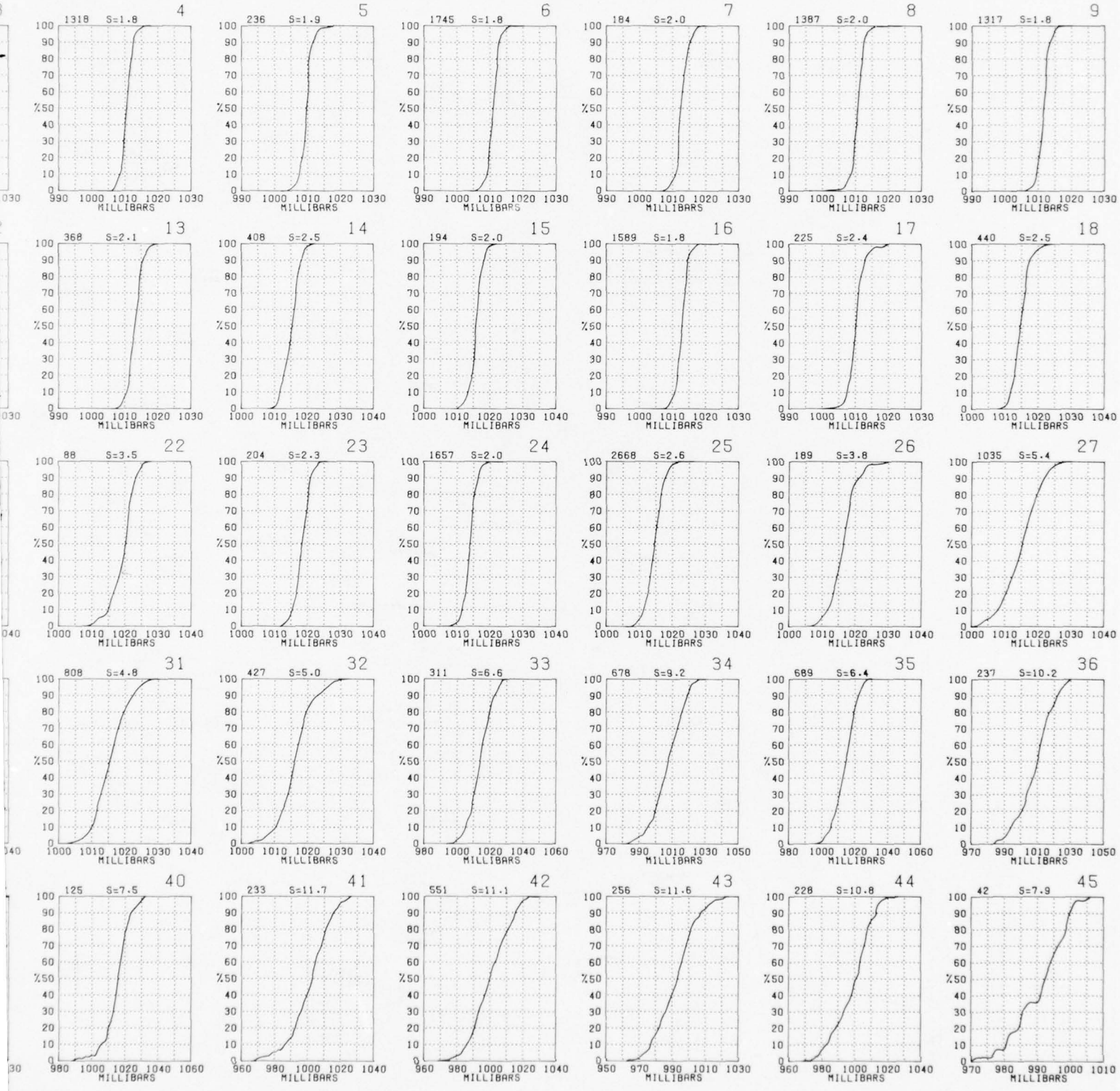


SEA LEVEL PRESSURE



Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

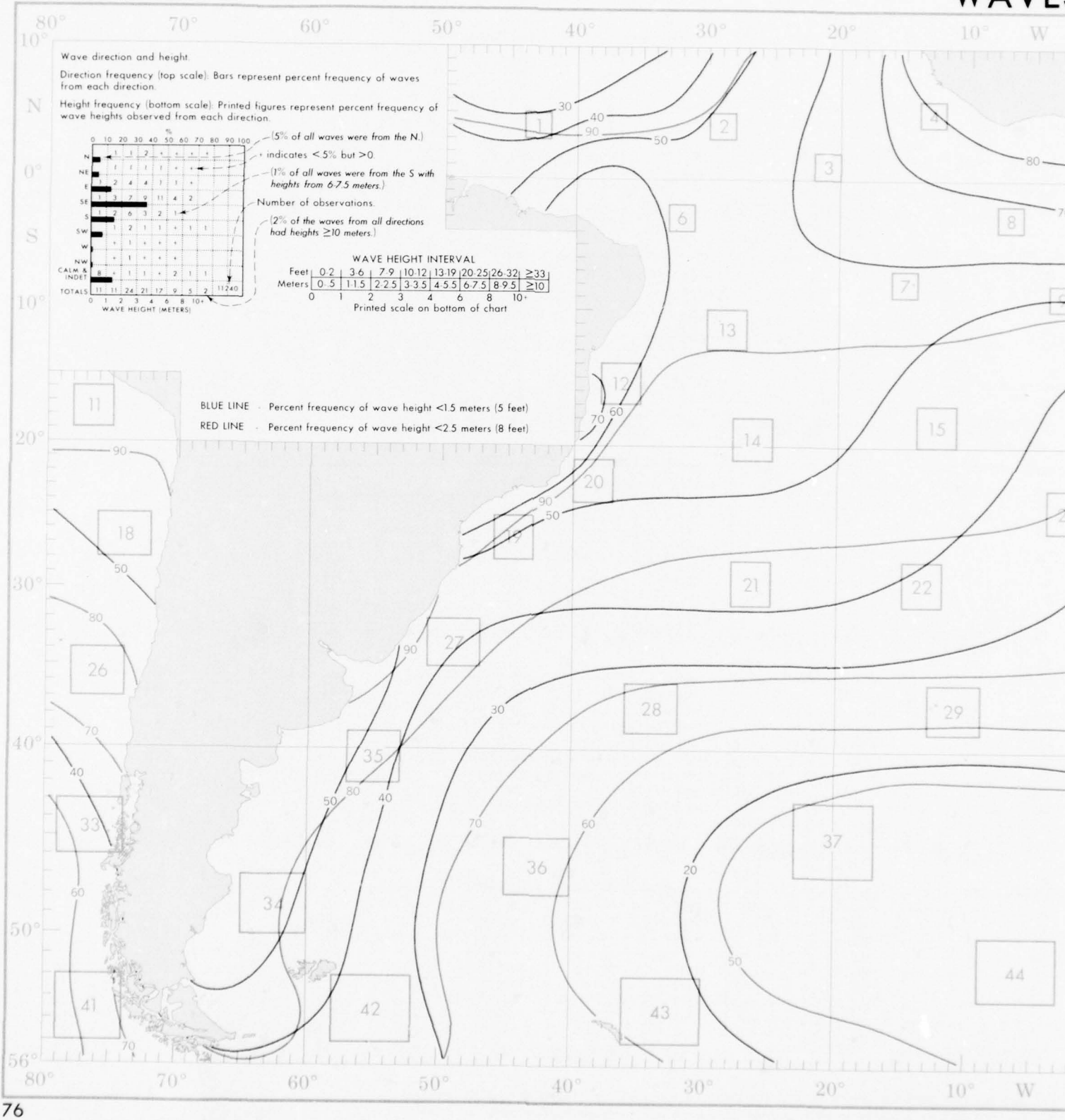
MARCH



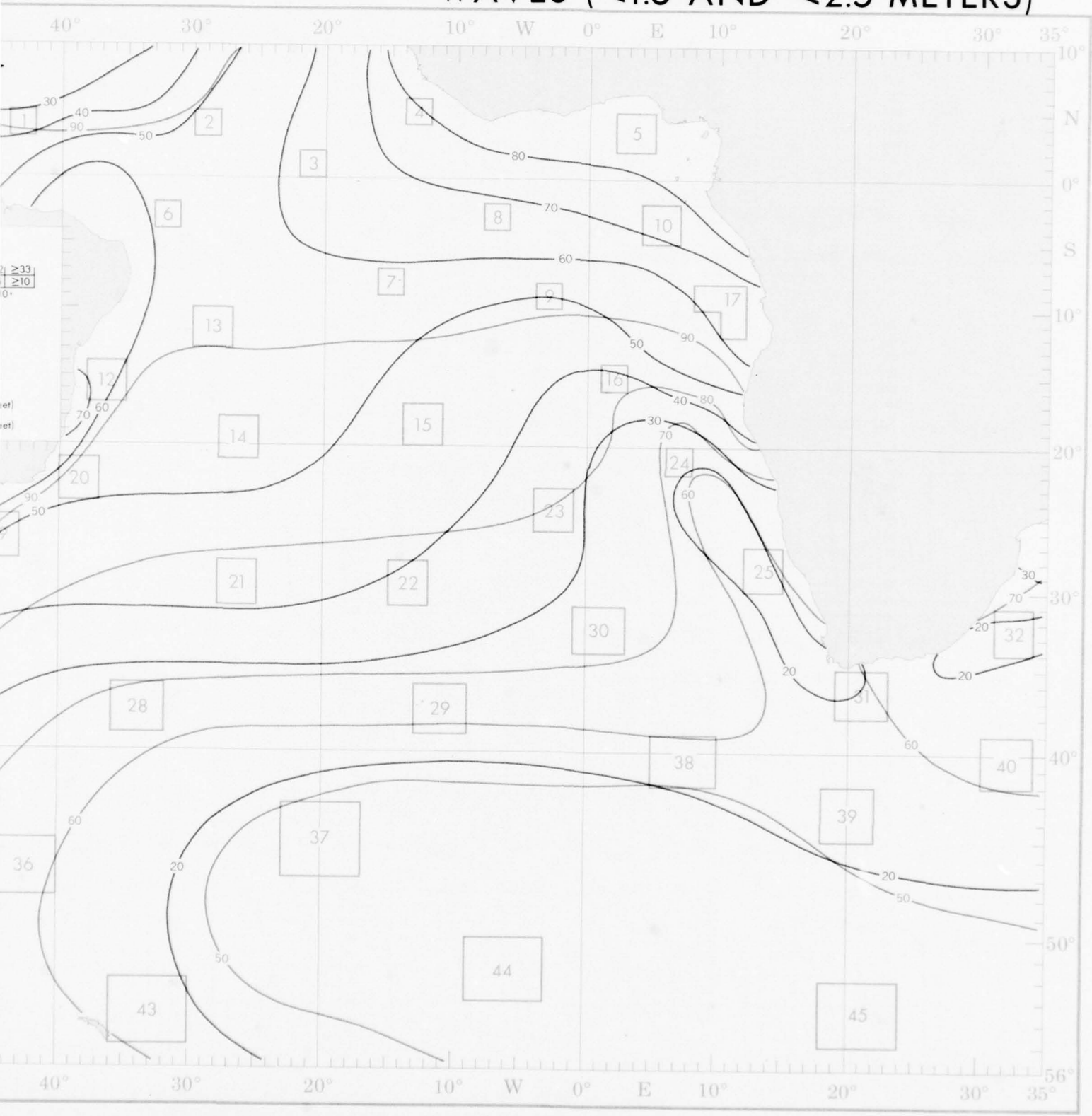
nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH

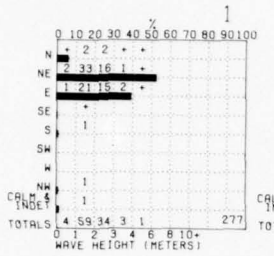
WAVES (

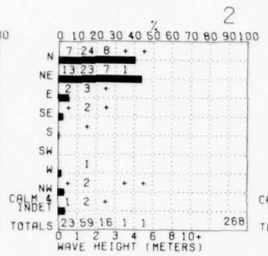

Wave direction and height.
Direction frequency (top scale): Bars represent percent frequency of waves from each direction.
Height frequency (bottom scale): Printed figures represent percent frequency of wave heights observed from each direction.
(5% of all waves were from the N.)
+ indicates <.5% but >0.
(1% of all waves were from the S with heights from 6-7.5 meters.)
Number of observations.
(2% of the waves from all directions had heights ≥10 meters.)
WAVE HEIGHT (METERS)
WAVE HEIGHT INTERVAL
Feet 0-2 | 3-6 | 7-9 | 10-12 | 13-19 | 20-25 | 26-32 | ≥33
Meters 0-.5 | 1-1.5 | 2-2.5 | 3-3.5 | 4-5.5 | 6-7.5 | 8-9.5 | ≥10
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

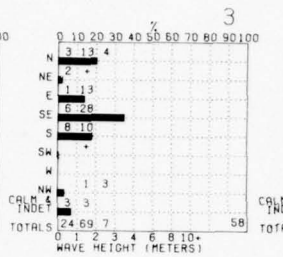
WAVES (<1.5 AND <2.5 METERS)

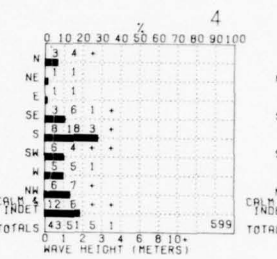


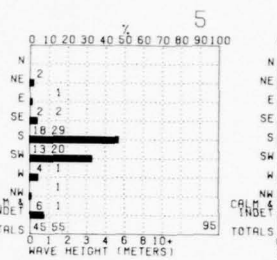
WAVE DIRECTION AND HEIGHT

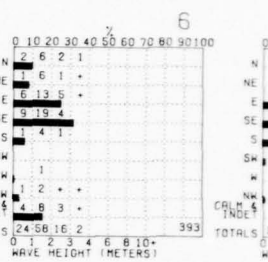


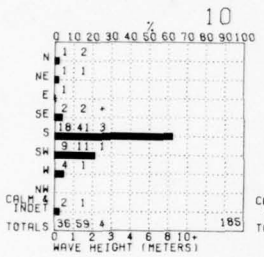


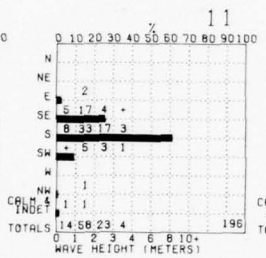


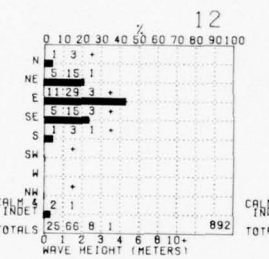


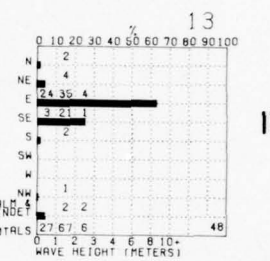






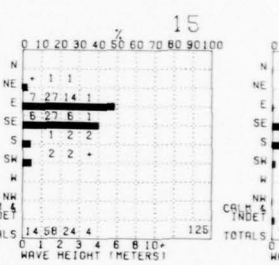


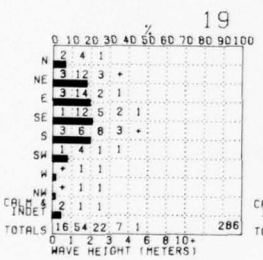


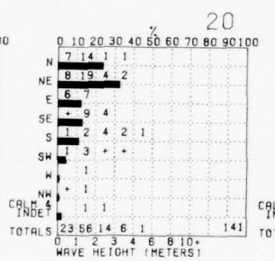


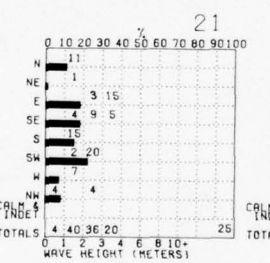
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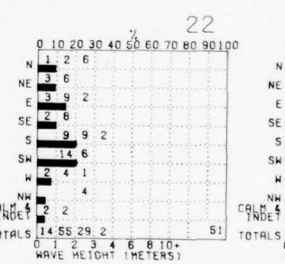
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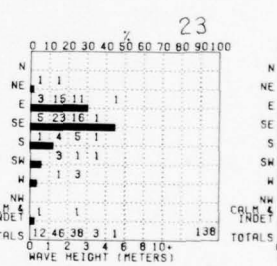


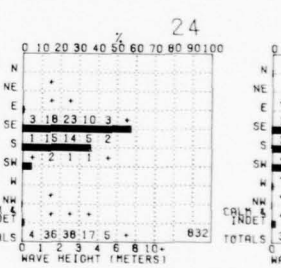






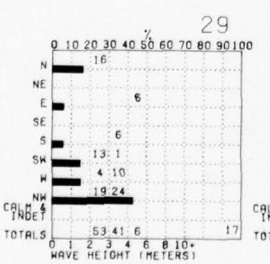


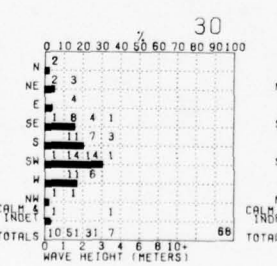


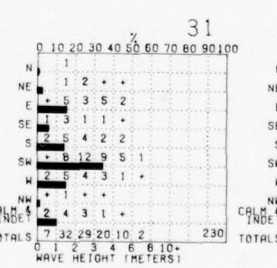


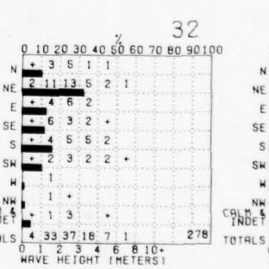
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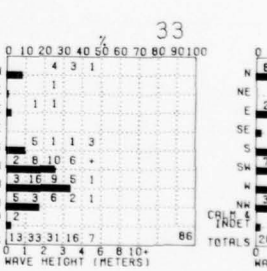
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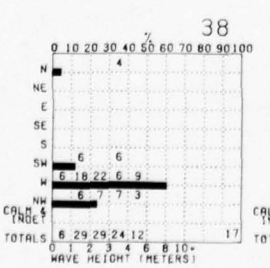


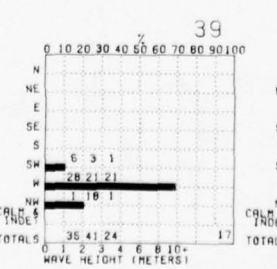


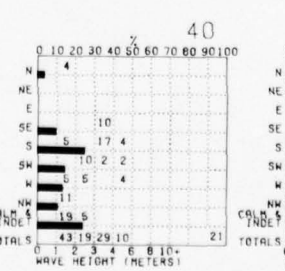


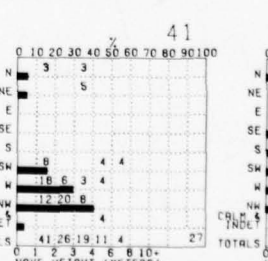
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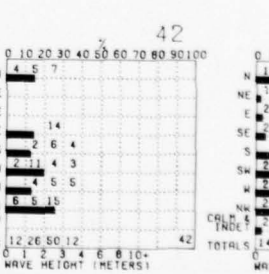
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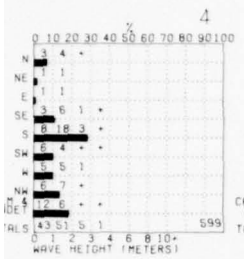


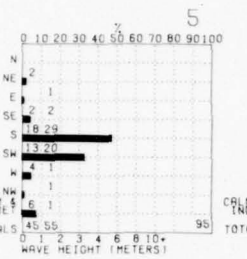


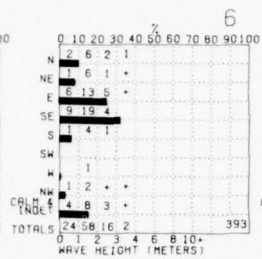


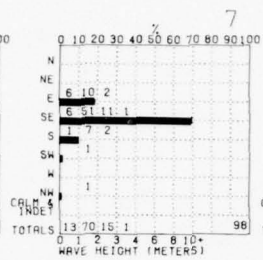


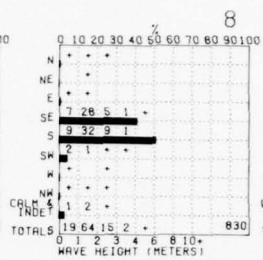
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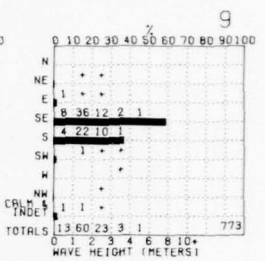


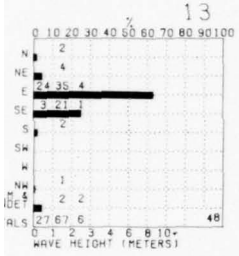






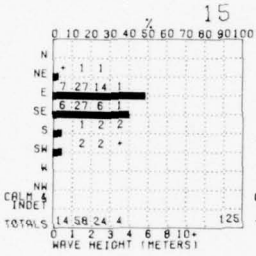


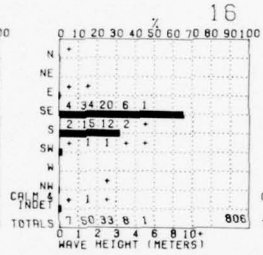


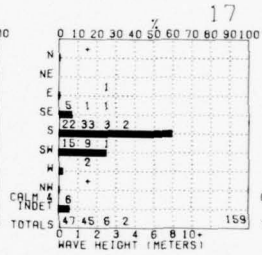


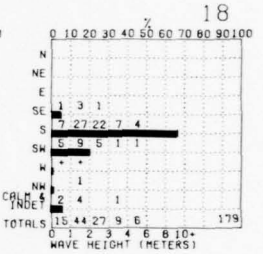
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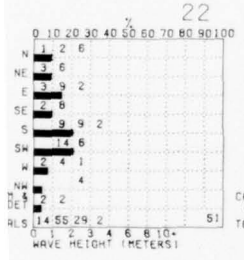
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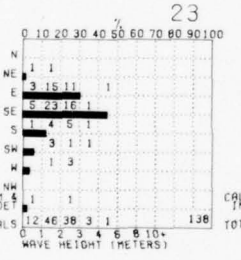


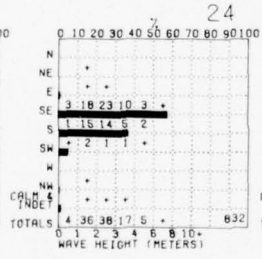


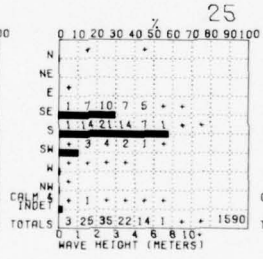


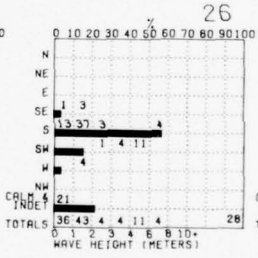


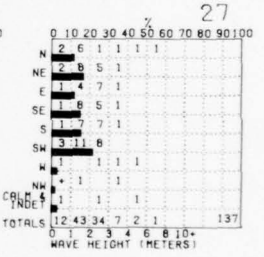


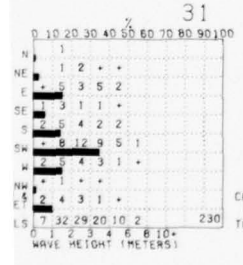


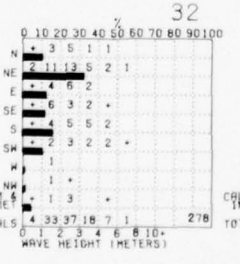


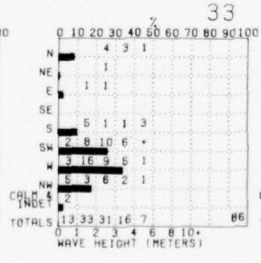


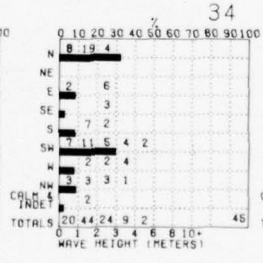


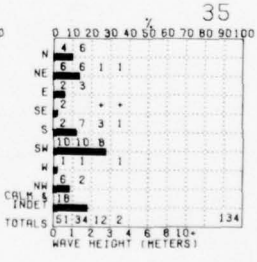






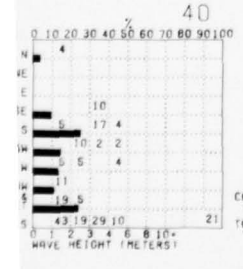


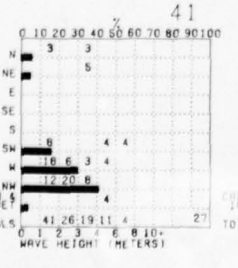


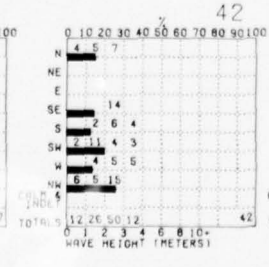


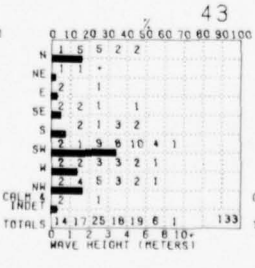
36

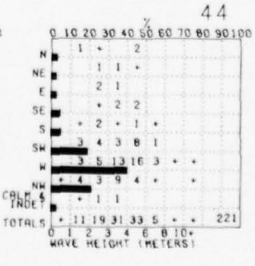
INSUFFICIENT DATA











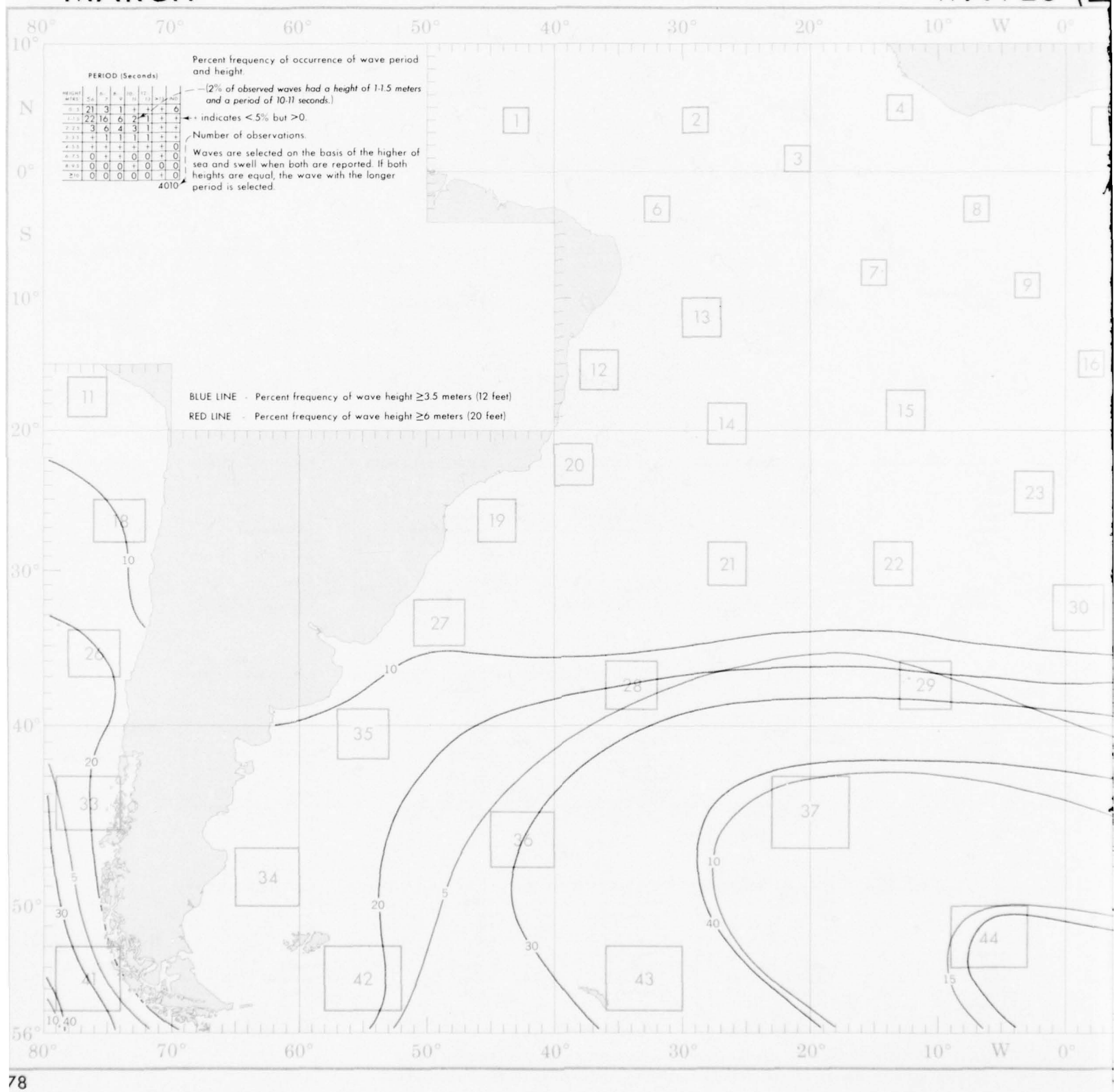
45

INSUFFICIENT DATA

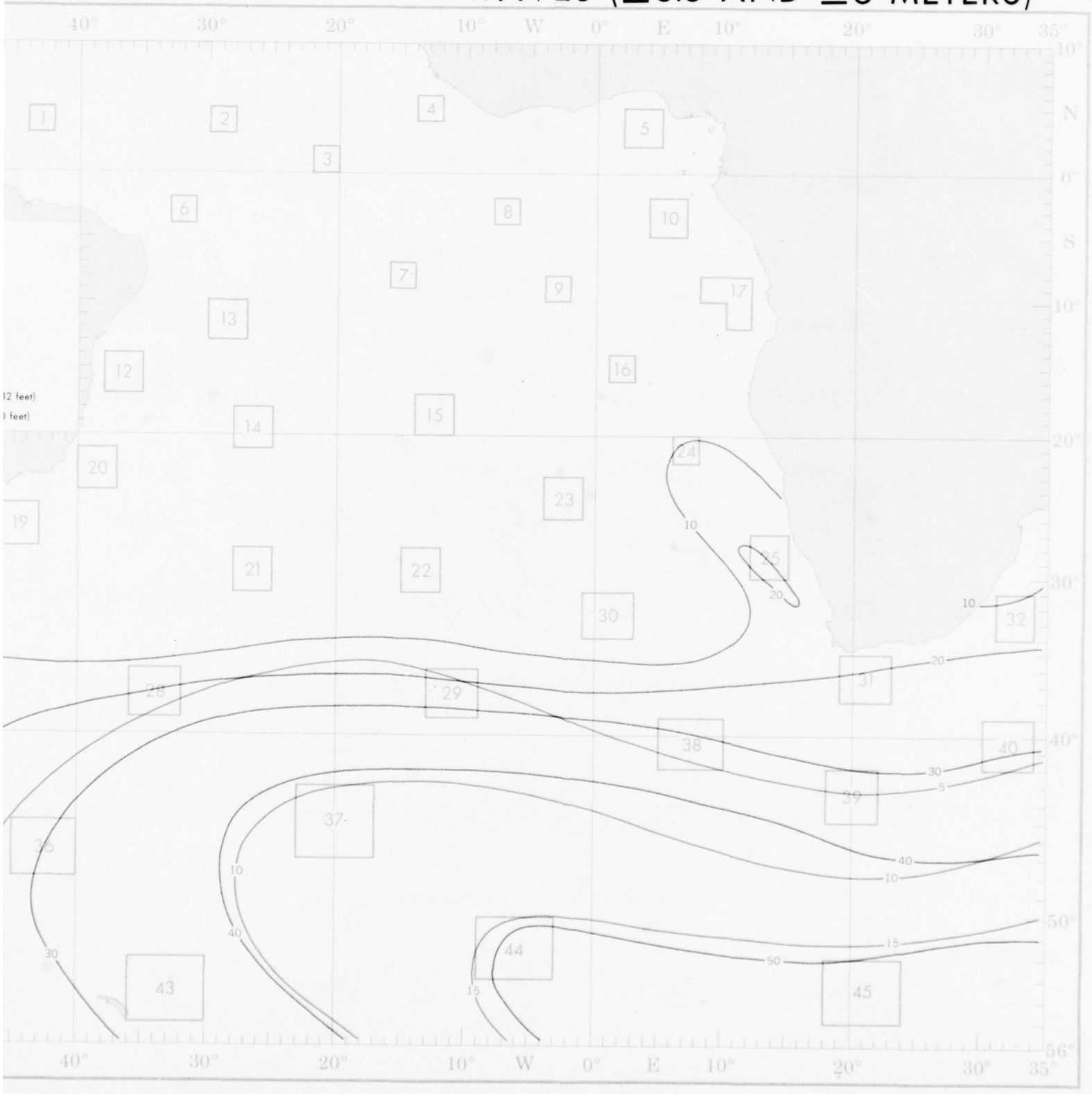
objective compilation of available data for specified areas without regard to suspected biases.
opposite page) are based on all available data subjectively adjusted where bias was evident.

MARCH

WAVES (≥


PERIOD (Seconds)
HEIGHT METERS
≤6
6-7
8-9
10-11
12-13
≥14
NO.
0-1 21 3 1 + + + 6
1-1.5 22 16 6 2 1 + +
2-2.5 3 6 4 3 1 + +
3-3.5 + 1 1 1 1 + +
4-5.5 + + + + + + 0
6-7.5 0 + + 0 0 + 0
8-9.5 0 0 0 + 0 0 0
≥10 0 0 0 0 0 + 0
4010
Percent frequency of occurrence of wave period and height.
(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)
+ indicates < 5% but >0.
Number of observations.
Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.
BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)
RED LINE - Percent frequency of wave height ≥6 meters (20 feet)
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N
0°
10° S
20°
30°
40°
50°
56°
1 2 3 4 6 7 8 9 11 12 13 14 15 16 18 19 20 21 22 23 25 27 28 29 30 33 34 35 36 37 41 42 43 44
10 20 5 30 40 15

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	0
1-1.5	24	23	9	1	0	0	2
2-2.5	4	14	10	4	1	0	0
3-3.5	0	0	1	1	+	0	0
4-5.5	0	0	+	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

277

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	+	0	1	0	0	3
1-1.5	18	18	13	1	0	0	8
2-2.5	3	4	4	2	1	0	2
3-3.5	1	0	0	+	0	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

272

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	21	2	3	2	0	0	3
1-1.5	25	14	13	3	5	0	3
2-2.5	0	0	2	5	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

63

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	23	4	1	2	0	0	17
1-1.5	14	14	5	3	3	+	8
2-2.5	+	2	+	+	1	+	1
3-3.5	0	+	0	0	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

642

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	25	2	4	3	0	0	16
1-1.5	14	13	8	2	2	0	13
2-2.5	0	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

103

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	1	1	+	0	0	9
1-1.5	16	19	5	1	2	+	12
2-2.5	1	5	5	1	+	+	3
3-3.5	0	0	1	0	0	+	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

412

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	22	2	1	1	0	0	14
1-1.5	20	9	10	1	3	0	15
2-2.5	1	2	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

194

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	1	1	0	0	4
1-1.5	22	20	5	3	3	1	4
2-2.5	1	6	8	4	1	2	2
3-3.5	0	4	0	0	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

199

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	21	1	1	+	0	0	5
1-1.5	29	19	5	1	2	1	7
2-2.5	1	4	1	1	+	+	1
3-3.5	0	+	+	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

933

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	12	0	0	0	0	2
1-1.5	26	16	8	0	10	0	4
2-2.5	0	2	2	0	0	0	2
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

50

INSUFFICIENT DATA

14

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	2	0	0	0	0
1-1.5	26	23	7	1	1	0	0
2-2.5	7	5	7	2	2	0	0
3-3.5	0	2	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

125

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	2	1	1	0	+	3
1-1.5	26	14	7	1	+	0	4
2-2.5	3	5	7	2	2	1	2
3-3.5	0	1	3	1	1	+	0
4-5.5	0	0	1	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

294

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	2	1	0	0	0	6
1-1.5	25	15	4	3	1	1	5
2-2.5	4	0	5	2	0	0	4
3-3.5	1	1	1	1	0	1	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

143

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	0
1-1.5	16	8	8	0	4	4	0
2-2.5	8	20	0	8	0	0	0
3-3.5	0	4	8	4	4	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

25

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	2
1-1.5	14	24	16	0	0	0	2
2-2.5	4	6	14	0	4	2	0
3-3.5	0	0	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

51

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	1	0	0	3
1-1.5	14	18	4	3	2	0	3
2-2.5	6	12	12	1	3	0	1
3-3.5	0	0	2	0	1	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	1	+	+	0	0	1
1-1.5	10	14	4	1	2	1	5
2-2.5	8	12	9	4	2	+	3
3-3.5	2	7	3	2	2	+	1
4-5.5	0	1	2	1	+	+	+
6-7.5	0	+	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

835

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	0	0	0	0	0	0
2-2.5	6	29	6	0	0	12	0
3-3.5	0	6	24	6	6	0	0
4-5.5	0	0	0	0	6	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	0	0	0	0	1
1-1.5	14	25	6	3	3	0	0
2-2.5	0	6	17	3	4	0	0
3-3.5	0	0	4	0	1	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

69

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	0	0	0	0	2
1-1.5	8	6	8	2	1	+	7
2-2.5	3	11	4	3	3	1	3
3-3.5	+	7	7	2	+	0	3
4-5.5	1	3	3	1	1	0	+
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

230

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	14	9	5	1	0	+	4
2-2.5	8	13	6	3	+	+	7
3-3.5	1	7	5	3	1	0	1
4-5.5	0	2	1	1	1	+	1
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

280

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	0	0	0	0	0	5
1-1.5	13	2	6	1	5	2	3
2-2.5	8	8	7	5	0	1	2
3-3.5	1	3	5	5	1	1	0
4-5.5	1	1	1	1	1	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

86

37

INSUFFICIENT DATA

38

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	0
1-1.5	24	0	6	0	0	0	0
2-2.5	12	0	12	6	0	0	0
3-3.5	6	0	6	12	0	0	0
4-5.5	0	0	12	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

39

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	0	18	12	6	0	0
2-2.5	0	6	35	0	0	0	0
3-3.5	0	6	6	12	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

40

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	19	0	0	0	0	19
2-2.5	5	0	5	0	0	5	5
3-3.5	5	5	5	5	0	0	10
4-5.5	0	0	0	5	0	0	5
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

21

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	11	4	26	0	0	0	0
2-2.5	15	0	11	0	0	0	0
3-3.5	0	0	15	4	0	0	0
4-5.5	0	4	4	0	0	0	4
6-7.5	0	0	4	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

27

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	0
1-1.5	7	14	5	0	0	0	0
2-2.5	0	29	17	5	0	0	0
3-3.5	2	7	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

MARCH

4

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	23	4	1	2	0	0	17
1-1.5	14	14	5	3	3	+	8
2-2.5	+	2	+	+	1	+	1
3-3.5	0	+	0	0	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

642

5

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	25	2	4	3	0	0	16
1-1.5	14	13	8	2	2	0	13
2-2.5	0	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

103

6

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	1	1	+	0	0	9
1-1.5	16	19	5	1	2	+	12
2-2.5	1	5	5	1	+	+	3
3-3.5	0	0	1	0	0	+	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

412

7

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	2	0	0	0	0	0
1-1.5	23	30	8	4	3	0	1
2-2.5	0	4	8	0	0	2	1
3-3.5	0	0	0	1	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

101

8

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	1	+	+	0	0	4
1-1.5	24	20	7	3	3	1	5
2-2.5	3	5	3	2	1	+	1
3-3.5	+	+	1	+	+	0	+
4-5.5	+	+	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

844

9

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	3
1-1.5	22	19	7	2	4	1	5
2-2.5	6	8	4	2	1	1	1
3-3.5	+	+	1	1	0	+	+
4-5.5	0	0	+	+	+	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

781

13

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	12	0	0	0	0	2
1-1.5	26	16	8	0	10	0	4
2-2.5	0	2	2	0	0	0	2
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

50

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	2	0	0	0	0
1-1.5	26	23	7	1	1	0	0
2-2.5	7	5	7	2	2	0	0
3-3.5	0	2	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

125

16

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	0	+	0	0	1
1-1.5	18	17	5	3	1	1	5
2-2.5	5	12	9	3	1	1	2
3-3.5	1	3	2	1	1	+	0
4-5.5	+	+	+	+	+	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

808

17

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	29	4	2	0	0	0	14
1-1.5	25	11	4	1	0	0	1
2-2.5	1	2	1	1	1	1	0
3-3.5	0	1	0	0	0	1	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

167

18

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	0	4	0	0	2
1-1.5	12	11	6	4	1	1	6
2-2.5	1	9	10	2	3	1	0
3-3.5	0	3	3	0	0	1	2
4-5.5	0	2	4	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

193

22

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	2
1-1.5	14	24	16	0	0	0	2
2-2.5	4	6	14	0	4	2	0
3-3.5	0	0	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

51

23

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	1	0	0	3
1-1.5	14	18	4	3	2	0	3
2-2.5	6	12	12	1	3	0	1
3-3.5	0	0	2	0	1	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

24

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	1	+	+	0	0	1
1-1.5	10	14	4	1	2	1	5
2-2.5	8	12	9	4	2	+	3
3-3.5	2	7	3	2	2	+	1
4-5.5	0	1	2	1	+	+	+
6-7.5	0	+	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

835

25

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	+	0	0	0	1
1-1.5	7	8	4	2	1	+	4
2-2.5	7	9	8	4	1	+	4
3-3.5	3	7	5	3	1	+	3
4-5.5	1	3	5	2	1	+	1
6-7.5	0	+	+	+	+	+	+
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	+	0	0	0

1591

26

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	7	0	0	21
1-1.5	32	7	4	0	0	0	0
2-2.5	0	4	0	0	0	0	0
3-3.5	0	0	0	4	0	0	0
4-5.5	0	0	0	7	0	4	0
6-7.5	0	0	0	4	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

28

27

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	1	1	0	0	4
1-1.5	22	11	6	0	1	0	2
2-2.5	8	12	7	4	0	1	1
3-3.5	1	1	2	0	0	1	2
4-5.5	0	1	0	0	0	1	1
6-7.5	0	1	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

140

31

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	0	0	0	0	2
1-1.5	8	6	8	2	1	+	7
2-2.5	3	11	4	3	3	1	3
3-3.5	+	7	7	2	+	0	3
4-5.5	1	3	3	1	1	0	+
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

230

32

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	14	9	5	1	0	+	4
2-2.5	8	13	6	3	+	+	7
3-3.5	1	7	5	3	1	0	1
4-5.5	0	2	1	1	1	+	1
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

280

33

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	0	0	0	0	0	5
1-1.5	13	2	6	1	5	2	3
2-2.5	8	8	7	5	0	1	2
3-3.5	1	3	5	5	1	1	0
4-5.5	1	1	1	1	1	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

86

34

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	4	0	0	0	4
1-1.5	17	13	0	4	0	0	9
2-2.5	7	9	7	2	0	0	0
3-3.5	2	2	2	2	0	0	0
4-5.5	0	2	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

46

35

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	5	0	0	0	0	38
1-1.5	18	5	1	1	0	0	9
2-2.5	4	4	3	0	0	0	1
3-3.5	0	1	1	0	0	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

139

36

INSUFFICIENT DATA

40

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	19	0	0	0	0	19
2-2.5	5	0	5	0	0	5	5
3-3.5	5	5	5	5	0	0	10
4-5.5	0	0	0	5	0	0	5
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

21

41

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	11	4	26	0	0	0	0
2-2.5	15	0	11	0	0	0	0
3-3.5	0	0	15	4	0	0	0
4-5.5	0	4	4	0	0	0	4
6-7.5	0	0	4	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

27

42

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	0
1-1.5	7	14	5	0	0	0	0
2-2.5	0	29	17	5	0	0	0
3-3.5	2	7	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

42

43

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	9
1-1.5	11	4	0	0	0	0	1
2-2.5	14	5	1	0	0	0	4
3-3.5	6	1	2	1	0	0	7
4-5.5	1	2	0	2	0	0	13
6-7.5	0	0	1	0	0	0	5
8-9.5	0	0	0	0	0	0	1
≥10	0	0	0	0	0	0	0

140

44

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	0	0	0	0	0	0
1-1.5	+	+	2	4	4	0	+
2-2.5	+	1	+	5	10	1	1
3-3.5	0	1	2	9	5	13	1
4-5.5	0	1	0	6	5	19	0
6-7.5	0	0	1	1	3	0	0
8-9.5	0	0	0	+	0	0	0
≥10	0	0	+	0	0	0	0

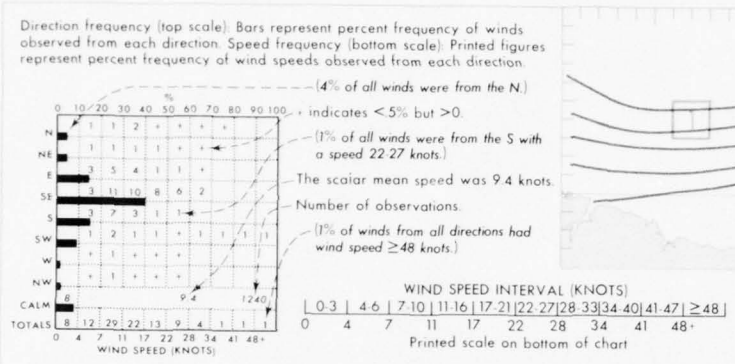
222

45

INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

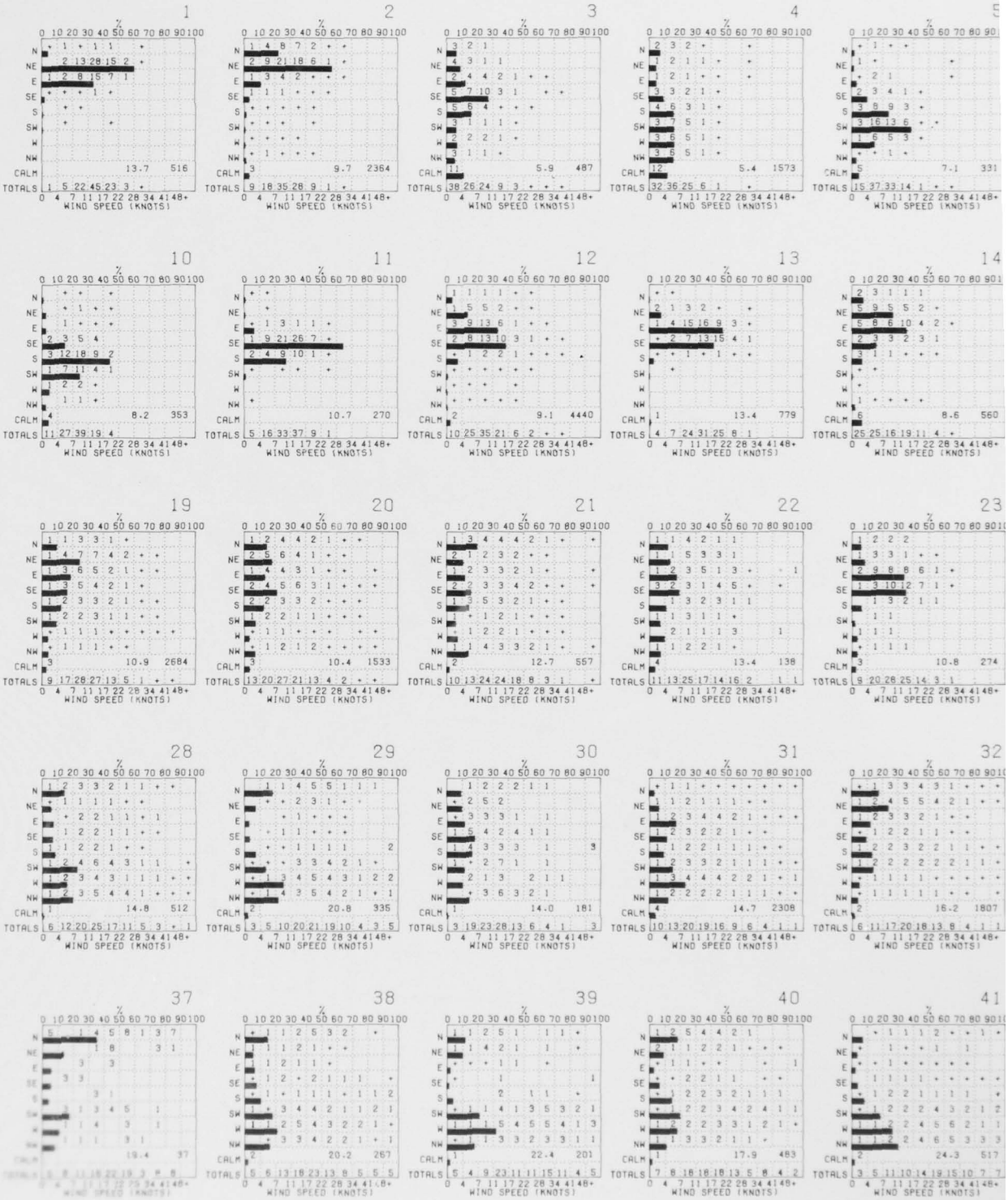
APRIL


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates <.5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

SURFACE WINDS



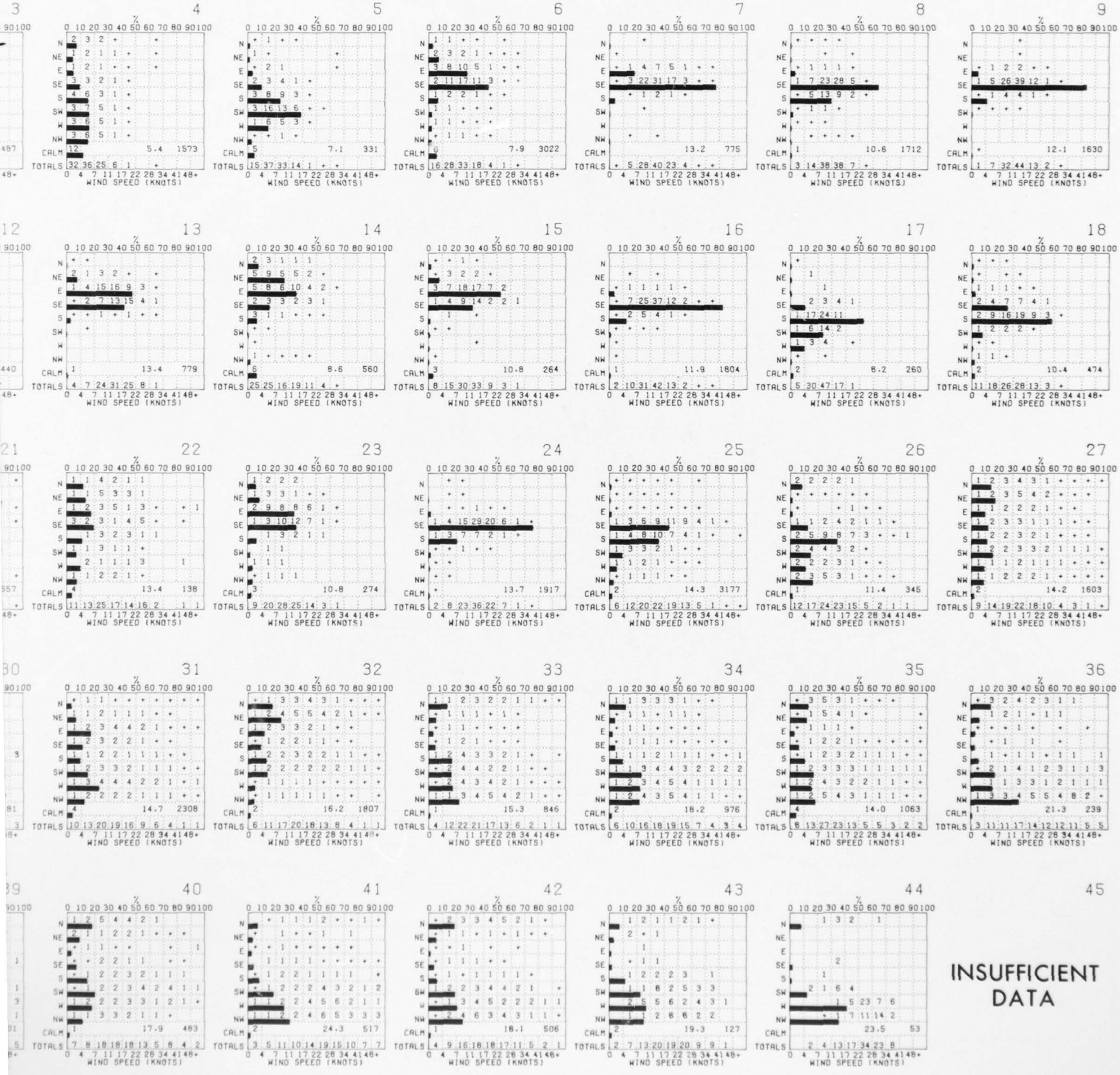
WIND DIRECTION AND SPEED



Graphs represent the objective compilation of available data for spec
The isopleth analyses (opposite page) are based on all available data

SPEED

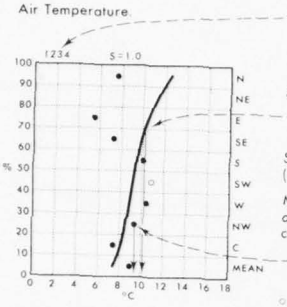
APRIL



INSUFFICIENT DATA

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL



Cumulative percent frequency of temperatures equal to or less than the temperature intersected by the curve.

(70% of all temperatures were ≤10.3 °C or ≤50.5 °F.)

S=Standard deviation of temperatures (°C).

Mean temperature for each wind direction, calm and for all data combined are represented by dots.

(With NW winds, the mean temperature was 9.4 °C or 48.9 °F.)

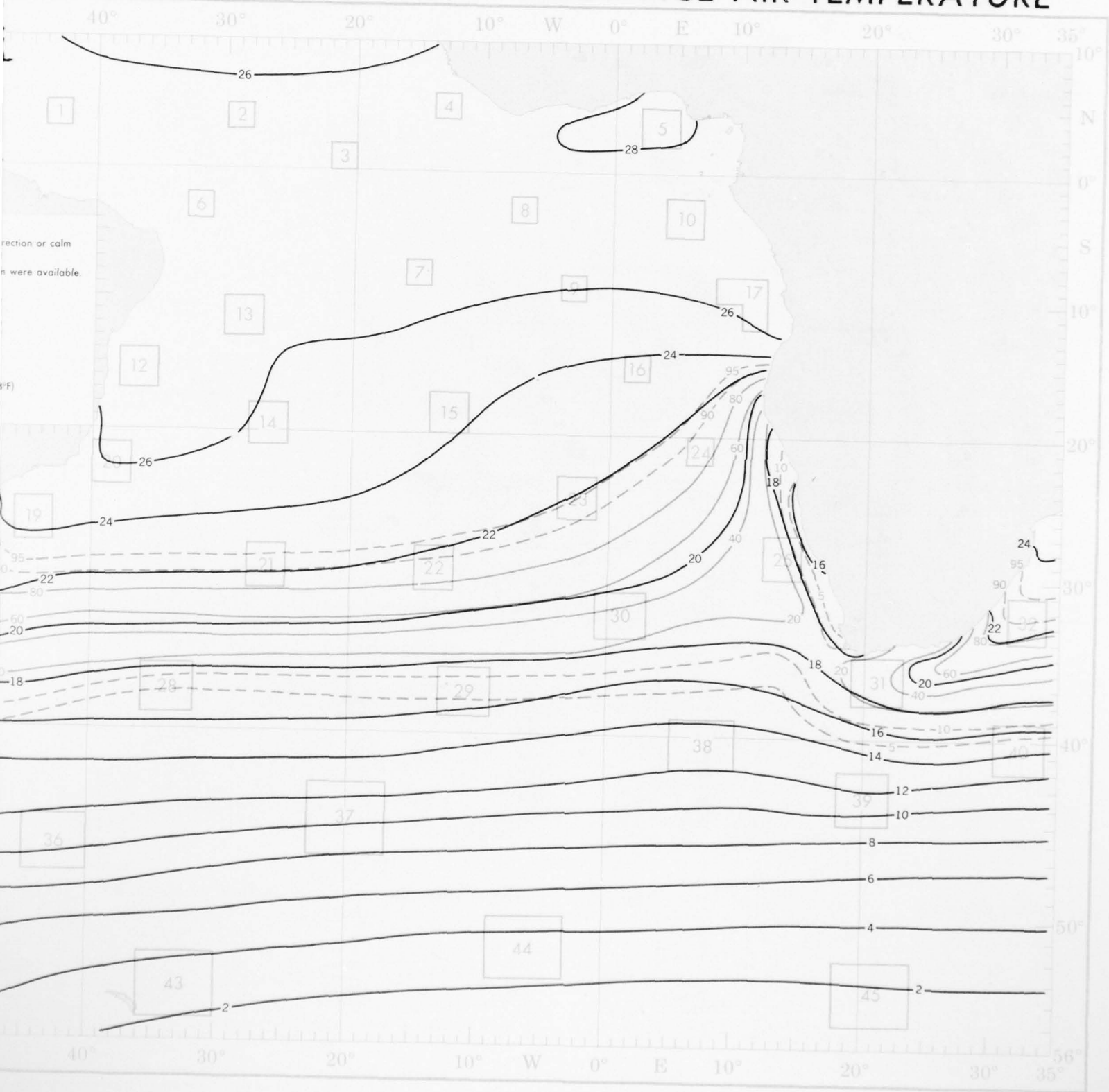
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.

The mean temperature is omitted when less than 10 observations for a direction or calm were available.

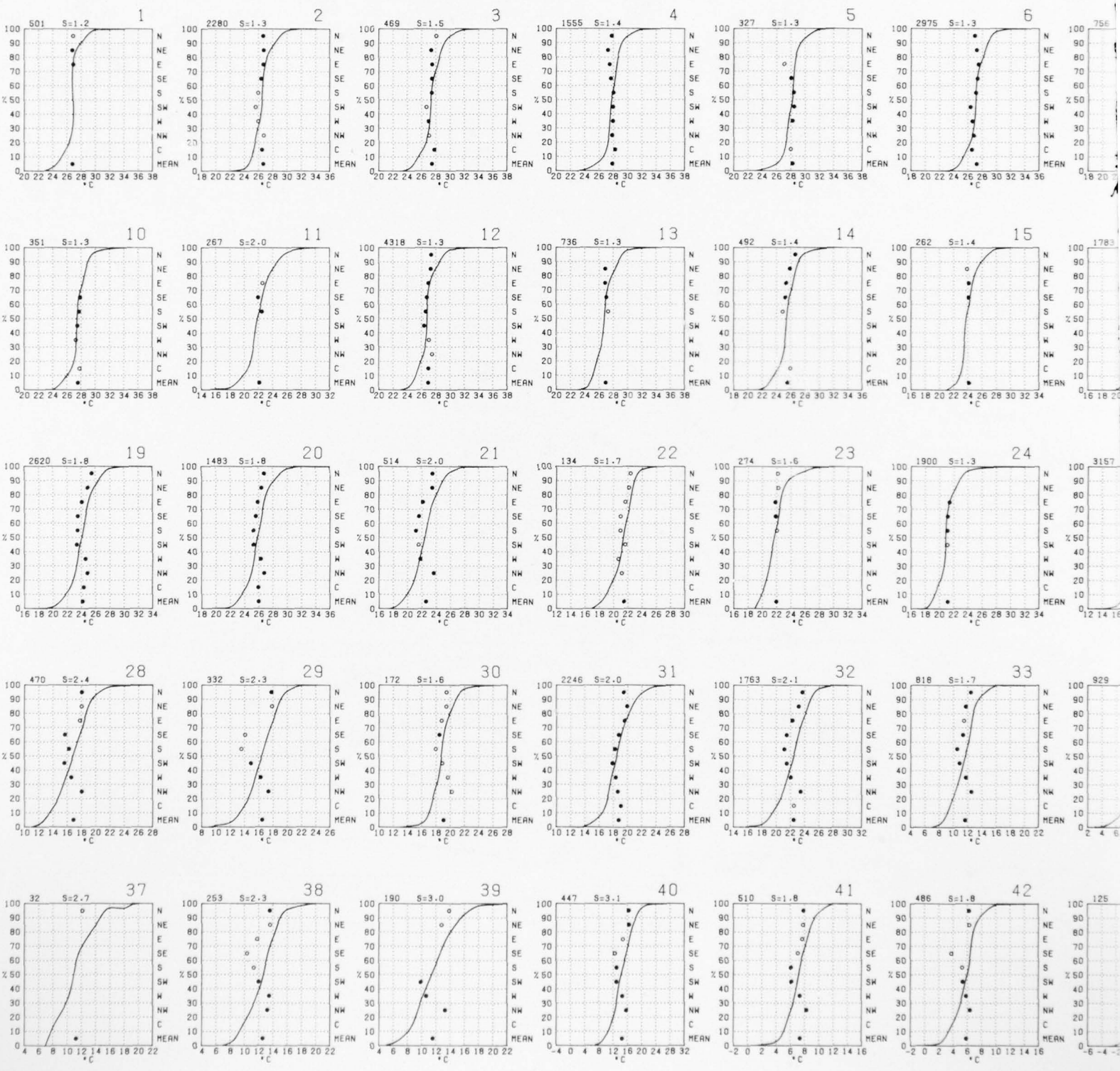
BLACK LINE - Mean air temperature (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE



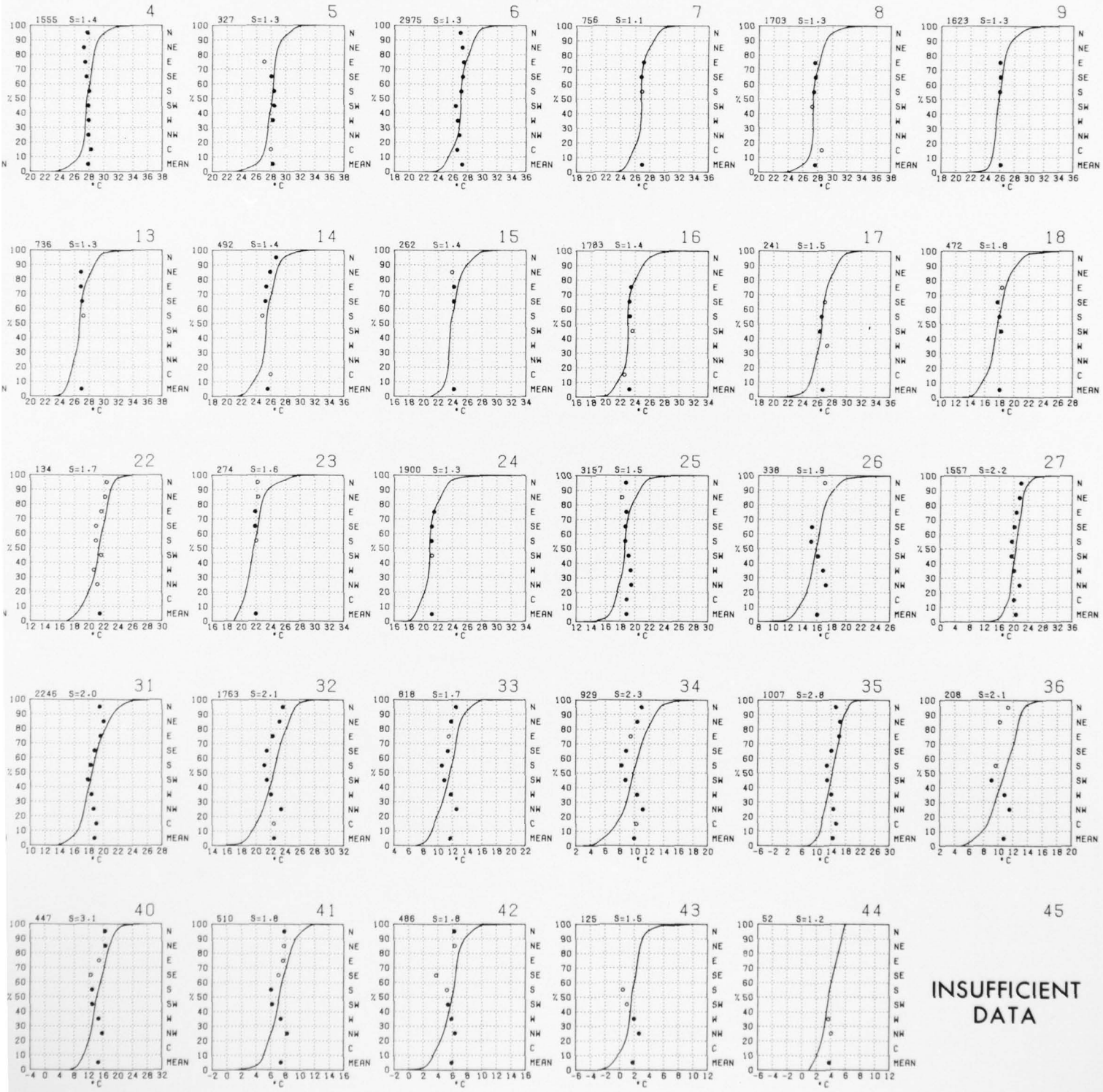
SURFACE AIR TEMPERATURE



Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

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APRIL



he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL

TEMPERATURE EXTR

Wind speed and air temperature.

Percent frequency of simultaneous occurrence of specified temperature (°C) and wind speed (knots).

WIND SPEED (kts)

Temp (°C)	0-3	4-10	11-21	22-33	≥34
4..5	18	8	7	1	1
2..3	17	8	7	1	1
0..1	13	6	5	1	1
-2..-1	1	+	0	0	0
-4..-3	0	0	0	0	0
-6..-5	+	0	0	+	+
-8..-7	1	+	0	0	0
-10..-9	0	0	0	0	0
-12..-11	1	+	0	0	0
-14..-13	1	0	0	0	0
-16..-15	1	+	0	0	0

3550

(1% of *all observations reported temperature 2-3 °C simultaneously with wind speed of 22-33 kts.*)

+ Indicates <.5% but >0.

Number of observations.

Use of this table in determination of Potential Superstructure Icing is explained in the text.

BLACK LINE - Percent frequency of T-H index ≥24°C (75.2°F) (discomfort may be experienced due to heat)

BLUE LINE - Minimum (1%) air temperature (°C) (1% of the temperatures were equal to or less than the given value)

RED LINE - Maximum (99%) air temperature (°C) (1% of the temperatures were greater than the given value)

TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	1	0	0
28.29	0	5	16	1	0
26.27	1	20	46	2	0
24.25	0	2	6	0	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

501

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	2	1	+	0
28.29	2	11	8	+	0
26.27	6	33	23	1	0
24.25	2	6	4	+	0
22.23	+	+	+	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2292

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	1	+	0	0	0
30.31	3	4	+	+	0
28.29	13	21	4	+	0
26.27	18	22	5	+	+
24.25	3	2	1	0	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

469

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	1	+	0	0	0
30.31	5	5	+	0	0
28.29	19	32	3	0	0
26.27	9	19	3	+	0
24.25	+	2	1	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1668

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	3	11	2	0	0
28.29	9	47	7	0	0
26.27	3	9	5	1	0
24.25	0	2	0	0	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

327

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	3	1	0	0
28.29	6	24	10	+	0
26.27	9	30	10	+	0
24.25	2	4	1	+	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3014

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	0	0	0	0
32.33	0	1	0	0	0
30.31	2	5	1	0	0
28.29	6	31	9	0	0
26.27	4	26	11	0	0
24.25	0	3	2	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

357

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	1	0	0
26.27	+	3	2	0	0
24.25	+	8	8	0	0
22.23	2	17	16	+	0
20.21	2	17	18	1	0
18.19	0	2	1	0	0
16.17	0	1	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

267

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	+	+	+	0	0
30.31	+	2	1	0	0
28.29	3	16	6	+	0
26.27	6	37	17	2	+
24.25	1	4	3	+	+
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4340

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	+	0
30.31	+	1	2	+	0
28.29	1	9	15	2	0
26.27	2	20	33	4	0
24.25	0	2	5	1	0
22.23	0	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

736

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	1	+	0	0	0
28.29	1	5	2	0	0
26.27	9	18	15	2	0
24.25	10	18	15	2	0
22.23	1	1	+	1	0
20.21	0	0	0	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

492

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	1	1	0	0	0
26.27	2	7	9	1	0
24.25	5	24	18	2	0
22.23	2	12	16	2	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

262

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	+	+	0	0
28.29	+	1	1	+	0
26.27	2	9	8	1	+
24.25	4	20	18	2	+
22.23	2	12	10	2	+
20.21	+	2	2	+	0
18.19	+	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2622

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	+	+	0	0
30.31	1	1	1	0	0
28.29	2	7	4	1	+
26.27	5	22	15	3	+
24.25	4	13	12	2	+
22.23	1	3	2	+	0
20.21	+	+	0	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1485

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	0	0
28.29	+	+	0	0	0
26.27	1	2	2	+	0
24.25	3	6	11	5	0
22.23	4	14	17	4	1
20.21	1	11	9	2	1
18.19	+	3	2	0	+
16.17	+	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

514

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	0	1	0
24.25	1	4	3	0	0
22.23	2	20	13	5	0
20.21	6	10	14	9	0
18.19	1	3	1	1	2
16.17	1	0	0	1	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

134

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	0	0	0
26.27	+	3	+	0	0
24.25	1	4	3	+	0
22.23	4	23	20	2	0
20.21	3	16	14	1	0
18.19	+	1	2	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

276

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	+	0
28.29	0	+	+	0	0
26.27	+	+	+	0	0
24.25	+	2	2	0	0
22.23	+	10	18	2	+
20.21	1	18	36	5	+
18.19	+	1	2	1	+
16.17	0	0	0	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1903

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	+	+	0	0
22.23	0	1	+	+	0
20.21	1	3	6	3	0
18.19	2	8	13	5	1
16.17	2	11	10	4	1
14.15	1	7	9	2	1
12.13	0	1	3	1	+
10.11	0	0	1	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

470

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	+	0	0
20.21	+	1	4	2	1
18.19	1	5	12	8	2
16.17	1	6	15	7	4
14.15	+	3	5	9	4
12.13	+	1	4	2	2
10.11	0	0	+	+	0
8.9	0	0	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

335

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	0	1	0
22.23	1	2	3	1	0
20.21	1	15	14	3	1
18.19	2	23	17	6	0
16.17	1	3	6	1	0
14.15	0	0	0	0	2
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

172

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	1	+	+	+
22.23	1	3	2	1	+
20.21	3	8	10	3	1
18.19	4	14	14	6	2
16.17	2	7	7	3	2
14.15	+	1	1	1	1
12.13	0	0	+	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2249

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	+	2	2	1	0
24.25	2	7	11	7	1
22.23	2	12	14	7	1
20.21	1	6	8	4	2
18.19	+	2	2	2	2
16.17	0	+	+	+	+
14.15	0	+	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1767

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	+	1	+	+	0
14.15	1	4	5	3	1
12.13	1	13	17	9	2
10.11	2	13	13	6	1
8.9	1	2	3	1	+
6.7	+	0	0	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

818

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	3	0
18.19	0	0	0	0	0
16.17	0	0	0	3	0
14.15	0	3	0	3	3
12.13	0	9	16	3	9
10.11	3	3	19	3	0
8.9	3	3	6	3	0
6.7	0	0	0	0	3
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

32

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	+
18.19	0	+	1	0	0
16.17	+	2	3	2	+
14.15	2	2	12	7	3
12.13	2	6	12	8	6
10.11	1	6	8	2	3
8.9	+	2	4	2	3
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

253

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	1	0	1	0	0
18.19	0	0	1	0	0
16.17	2	1	4	2	2
14.15	1	3	7	2	1
12.13	1	4	7	6	5
10.11	1	6	11	4	6
8.9	0	0	4	9	6
6.7	0	0	0	3	2
4.5	0	0	0	0	1
2.3	0	0	0	0	0
0.1	0	0	0	0	0

190

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	0	0	+	0
22.23	0	+	0	+	0
20.21	+	1	3	+	+
18.19	2	5	4	1	+
16.17	1	8	9	3	2
14.15	1	5	10	5	2
12.13	2	5	8	4	3
10.11	+	1	4	2	2
8.9	0	0	1	3	1
6.7	0	0	0	0	+
4.5	0	0	0	0	0

447

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	0	0
10.11	0	2	3	3	4
8.9	1	5	7	15	8
6.7	2	6	11	11	8
4.5	1	2	2	4	3
2.3	0	+	+	0	1
0.1	0	0	0	0	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

510

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	0	0
10.11	0	0	+	0	0
8.9	+	5	6	4	1
6.7	1	10	17	14	4
4.5	2	7	9	7	2
2.3	1	3	3	2	+
0.1	0	0	1	1	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

486

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

MPERATURE

APRIL

4

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	0	0	0
32.33	1	+	0	0	0
30.31	5	5	+	0	0
28.29	19	32	3	0	0
26.27	9	19	3	+	0
24.25	+	2	1	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1668

5

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	3	11	2	0	0
28.29	9	47	7	0	0
26.27	3	9	5	1	0
24.25	0	2	0	0	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

327

6

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	3	1	0	0
28.29	6	24	10	+	0
26.27	9	30	10	+	0
24.25	2	4	1	+	0
22.23	+	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3014

7

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	1	1	0	0
28.29	0	7	16	1	0
26.27	+	22	42	3	+
24.25	0	2	4	0	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

756

8

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
36.37	0	+	0	0	0
34.35	0	+	+	0	0
32.33	0	1	1	0	0
30.31	+	3	4	0	0
28.29	1	21	22	+	0
26.27	1	26	17	0	0
24.25	+	1	1	0	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0

1711

9

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	1	1	0	0
28.29	+	5	7	+	0
26.27	1	21	34	1	0
24.25	+	12	15	+	0
22.23	0	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1625

13

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	+	0
30.31	+	1	2	+	0
28.29	1	9	15	2	0
26.27	2	20	33	4	0
24.25	0	2	5	1	0
22.23	0	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

736

14

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	1	+	0	0	0
28.29	1	5	2	0	0
26.27	9	18	15	2	0
24.25	10	18	15	2	0
22.23	1	1	+	1	0
20.21	0	0	0	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

492

15

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	1	1	0	0	0
26.27	2	7	9	1	0
24.25	5	24	18	2	0
22.23	2	12	15	2	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

262

16

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	0	0	0
28.29	0	1	1	+	0
26.27	+	2	3	+	0
24.25	+	12	17	1	0
22.23	1	25	32	1	0
20.21	+	1	2	+	0
18.19	0	0	0	0	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1788

17

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	0	2	1	0	0
28.29	2	21	5	0	0
26.27	3	38	9	0	0
24.25	0	14	4	0	0
22.23	0	+	0	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

242

18

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	0	0	0
22.23	+	1	+	+	0
20.21	3	8	7	+	0
18.19	4	17	19	2	0
16.17	2	13	14	1	0
14.15	1	3	2	0	0
12.13	0	+	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

472

22

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	0	1	0
24.25	1	4	3	0	0
22.23	2	20	13	5	0
20.21	5	10	14	9	0
18.19	1	3	1	1	2
16.17	1	0	0	1	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

134

23

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	0	0	0
26.27	+	3	+	0	0
24.25	1	4	3	+	0
22.23	4	23	20	2	0
20.21	3	16	14	1	0
18.19	+	1	2	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

276

24

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	+	0
28.29	0	+	+	0	0
26.27	+	+	+	0	0
24.25	+	2	2	0	0
22.23	+	10	18	2	+
20.21	1	18	36	5	+
18.19	+	1	2	1	+
16.17	0	0	0	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1903

25

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	+	+	+	0	0
22.23	+	2	2	+	0
20.21	2	11	10	4	+
18.19	3	17	23	10	1
16.17	1	3	6	3	+
14.15	+	+	+	+	0
12.13	0	+	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

3180

26

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	0	+	0
22.23	1	0	0	0	0
20.21	1	1	1	+	0
18.19	2	9	7	1	0
16.17	5	18	12	2	1
14.15	2	11	15	2	1
12.13	1	1	3	1	0
10.11	0	0	0	0	0
8.9	0	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

338

27

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
25.29	0	+	+	0	0
26.27	+	+	1	+	0
24.25	1	3	4	1	+
22.23	2	11	14	4	1
20.21	3	11	13	4	2
18.19	2	6	7	3	1
16.17	1	1	2	1	+
14.15	+	+	0	1	0
12.13	0	+	0	0	0
10.11	0	0	0	0	+
8.9	0	0	0	0	0

1558

31

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	1	+	+	+
22.23	1	3	2	1	+
20.21	3	8	10	3	1
18.19	4	14	14	6	2
16.17	2	7	7	3	2
14.15	+	1	1	1	1
12.13	0	0	+	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2249

32

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	+	2	2	1	0
24.25	2	7	11	7	1
22.23	2	12	14	7	1
20.21	1	6	8	4	2
18.19	+	2	2	2	2
16.17	0	+	+	+	+
14.15	0	+	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1767

33

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	+	1	+	+	0
14.15	1	4	5	3	1
12.13	1	13	17	9	2
10.11	2	13	13	6	1
8.9	1	2	3	1	+
6.7	+	0	0	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

818

34

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	+	+	0
14.15	1	1	2	1	+
12.13	1	6	9	4	1
10.11	2	10	15	7	3
8.9	1	7	7	6	3
6.7	1	1	3	2	3
4.5	+	+	1	1	1
2.3	0	0	0	0	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

931

35

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	0	0
20.21	+	1	1	+	+
18.19	1	5	4	1	+
16.17	3	11	9	1	+
14.15	2	11	8	2	1
12.13	1	8	8	3	2
10.11	1	3	5	2	1
8.9	+	+	1	1	1
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

1007

36

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	0
14.15	0	+	+	3	2
12.13	1	4	14	9	5
10.11	2	9	11	10	6
8.9	0	5	4	3	5
6.7	0	1	2	1	2
4.5	0	+	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

208

40

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
24.25	+	0	0	+	0
22.23	0	+	0	+	0
20.21	+	1	3	+	+
18.19	2	5	4	1	+
16.17	1	8	9	3	2
14.15	1	5	10	5	2
12.13	2	5	8	4	3
10.11	+	1	4	2	2
8.9	0	0	1	3	1
6.7	0	0	0	0	+
4.5	0	0	0	0	0

447

41

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	+	0
10.11	0	2	3	3	4
8.9	1	5	7	15	8
6.7	2	6	11	11	8
4.5	1	2	2	4	3
2.3	0	+	+	0	1
0.1	0	0	0	0	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

510

42

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	0	0
10.11	0	0	+	0	0
8.9	+	5	6	4	1
6.7	1	10	17	14	4
4.5	2	7	9	7	2
2.3	1	3	3	2	+
0.1	0	0	1	1	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

486

43

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
8.9	0	1	0	0	0
6.7	0	0	1	0	1
4.5	0	2	2	4	0
2.3	2	11	19	13	5
0.1	1	6	16	8	4
-2.-1	0	0	1	4	0
-4.-3	0	1	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

126

44

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
6.7	0	0	4	0	2
4.5	0	2	12	44	4
2.3	0	4	13	13	2
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0

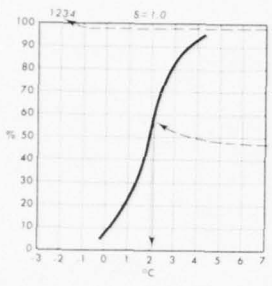
52

45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

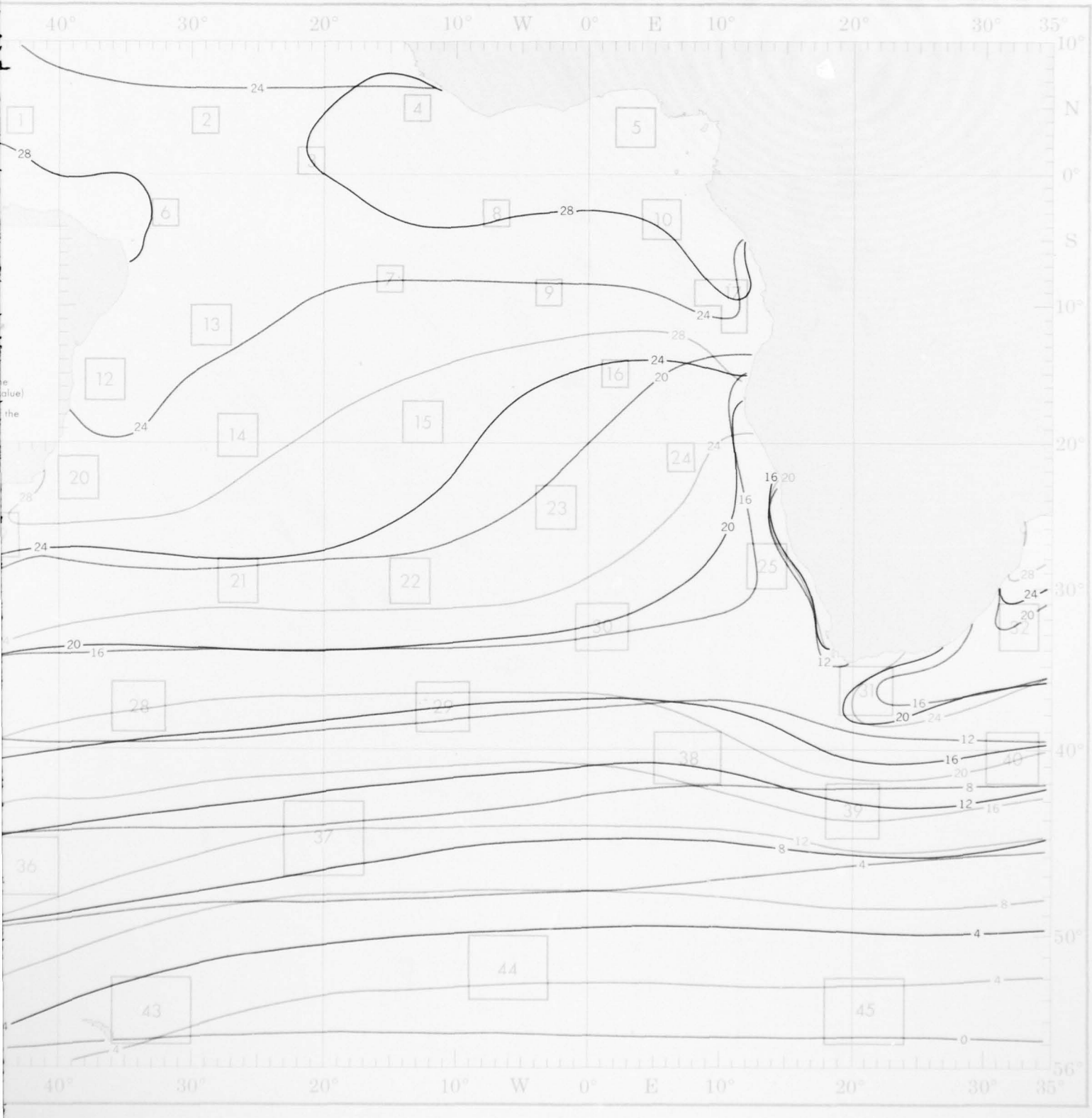
S= Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

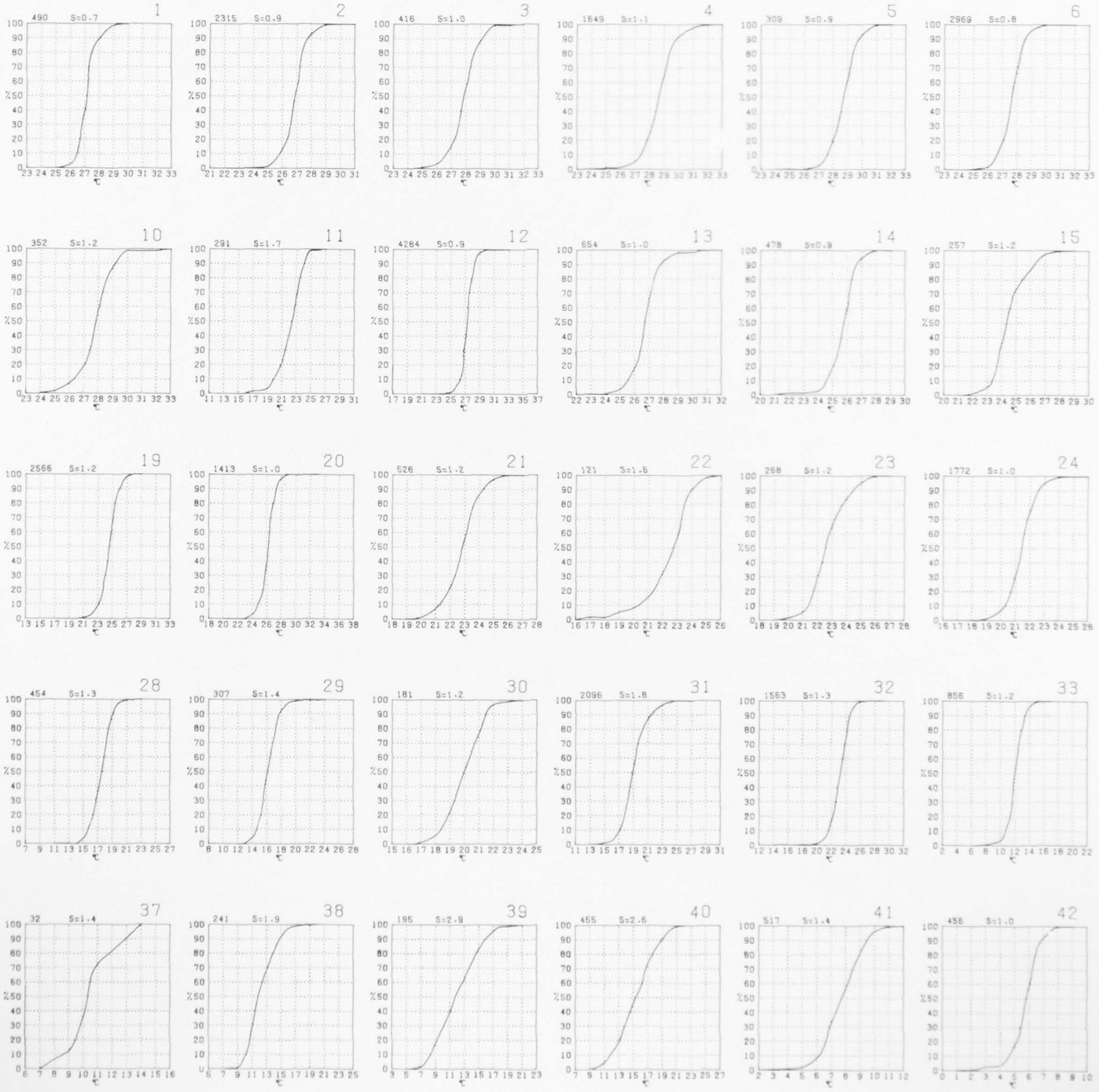
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

SEA SURFACE TEMPERATURE



SEA SURFACE TEMPERATURE

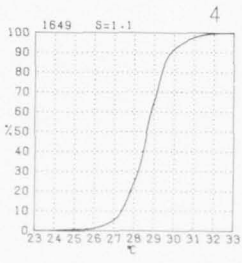


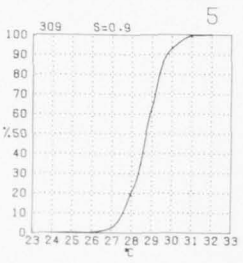
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

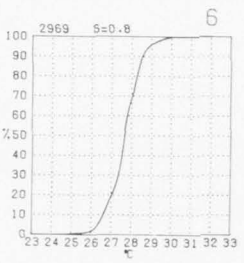
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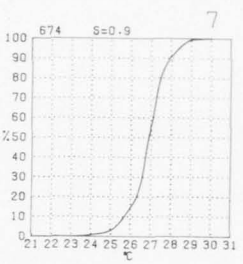
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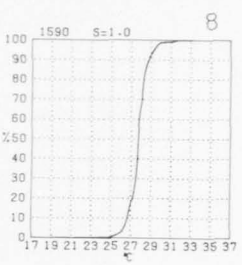


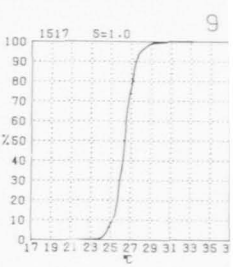




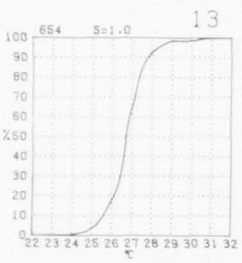


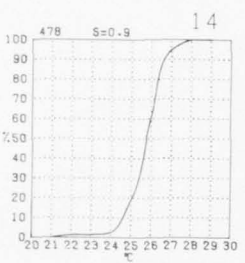


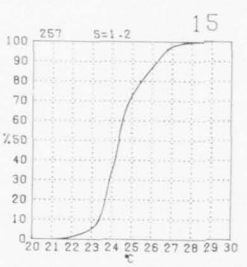


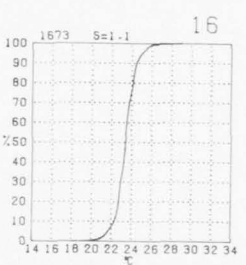


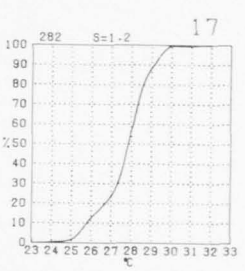


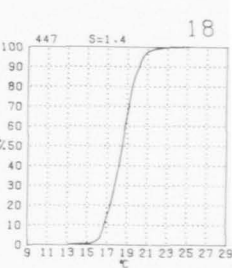




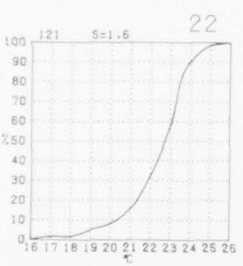


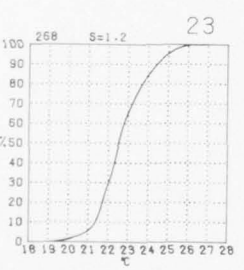


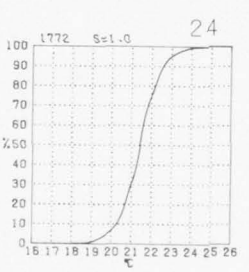


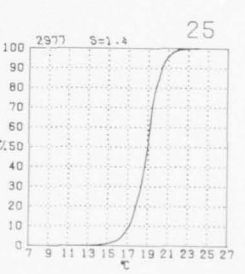


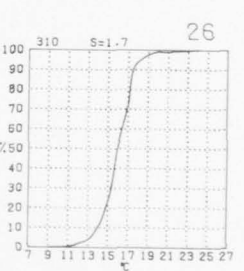


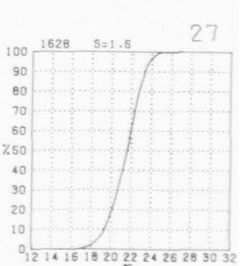




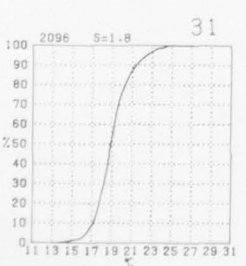


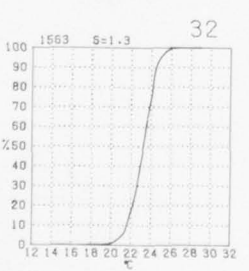


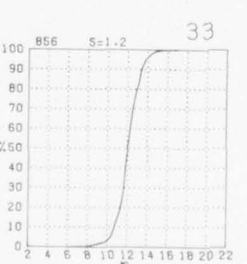


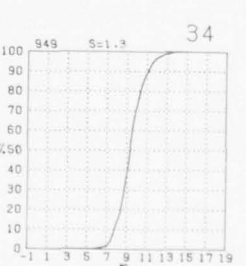


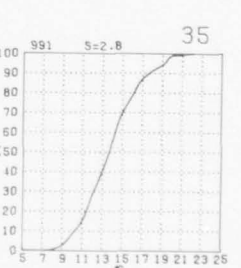


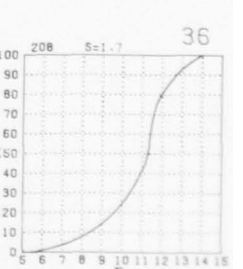




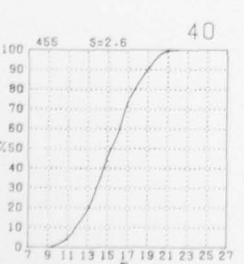


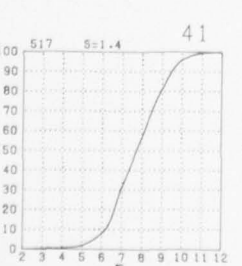


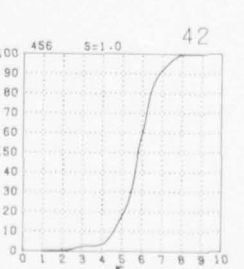


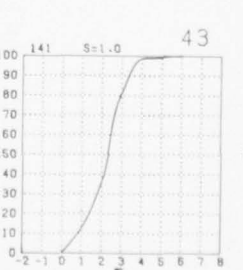


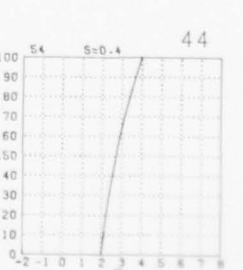












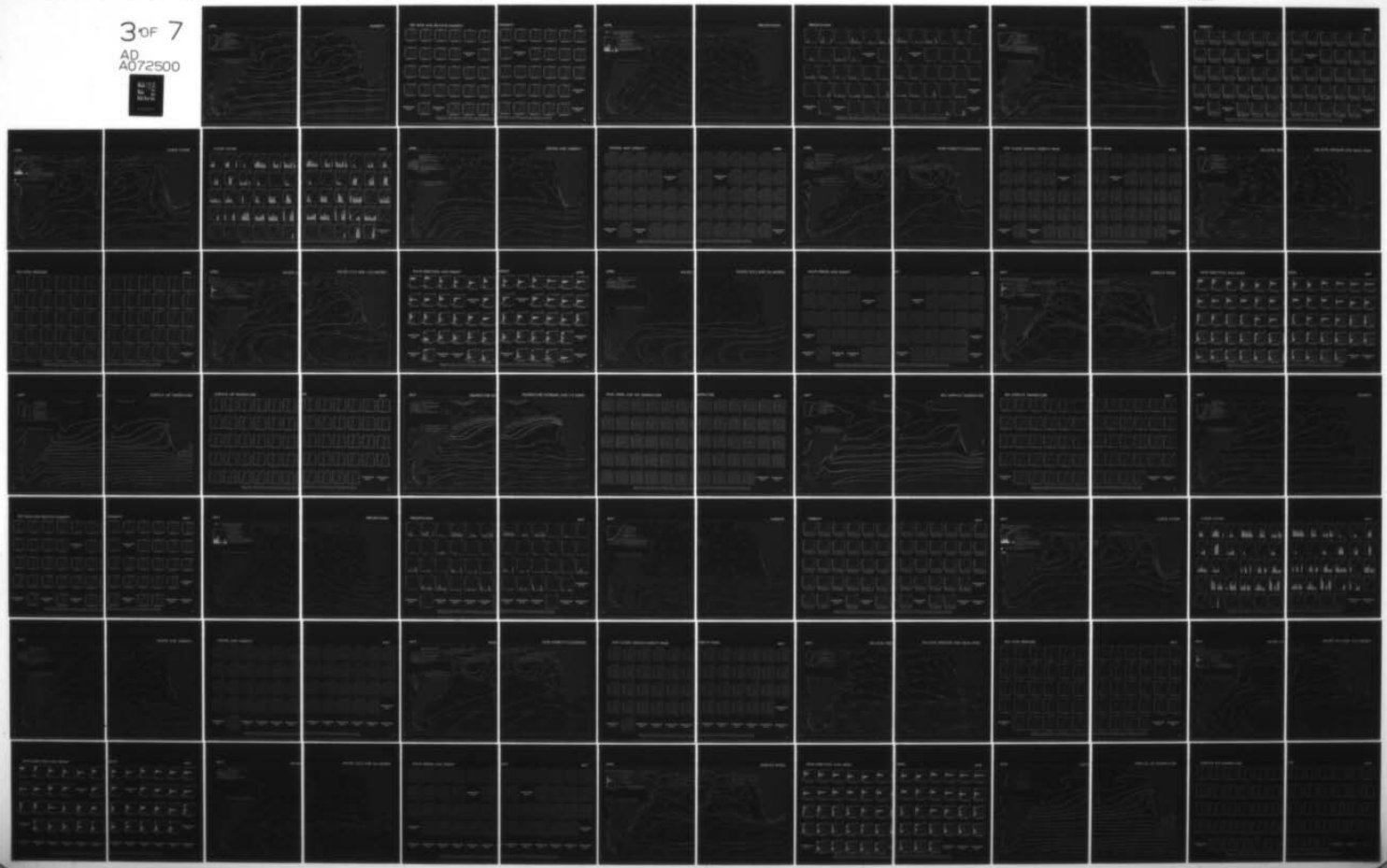
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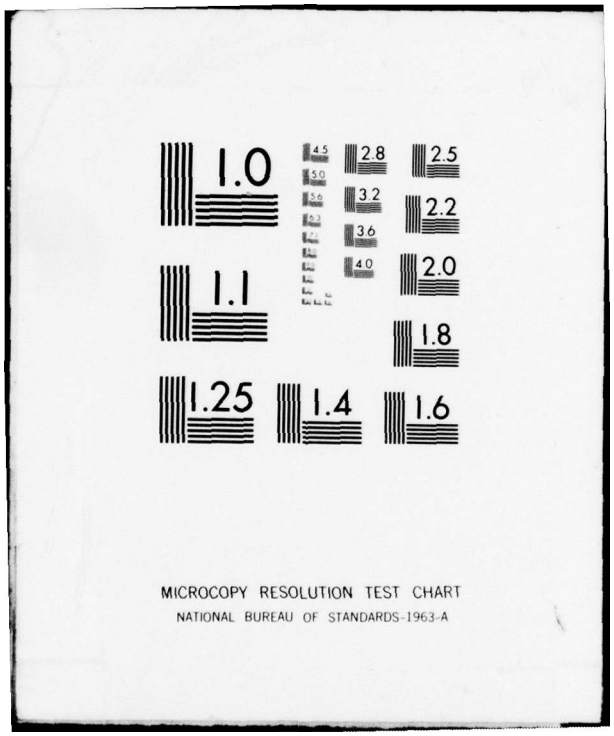
INSUFFICIENT DATA

esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

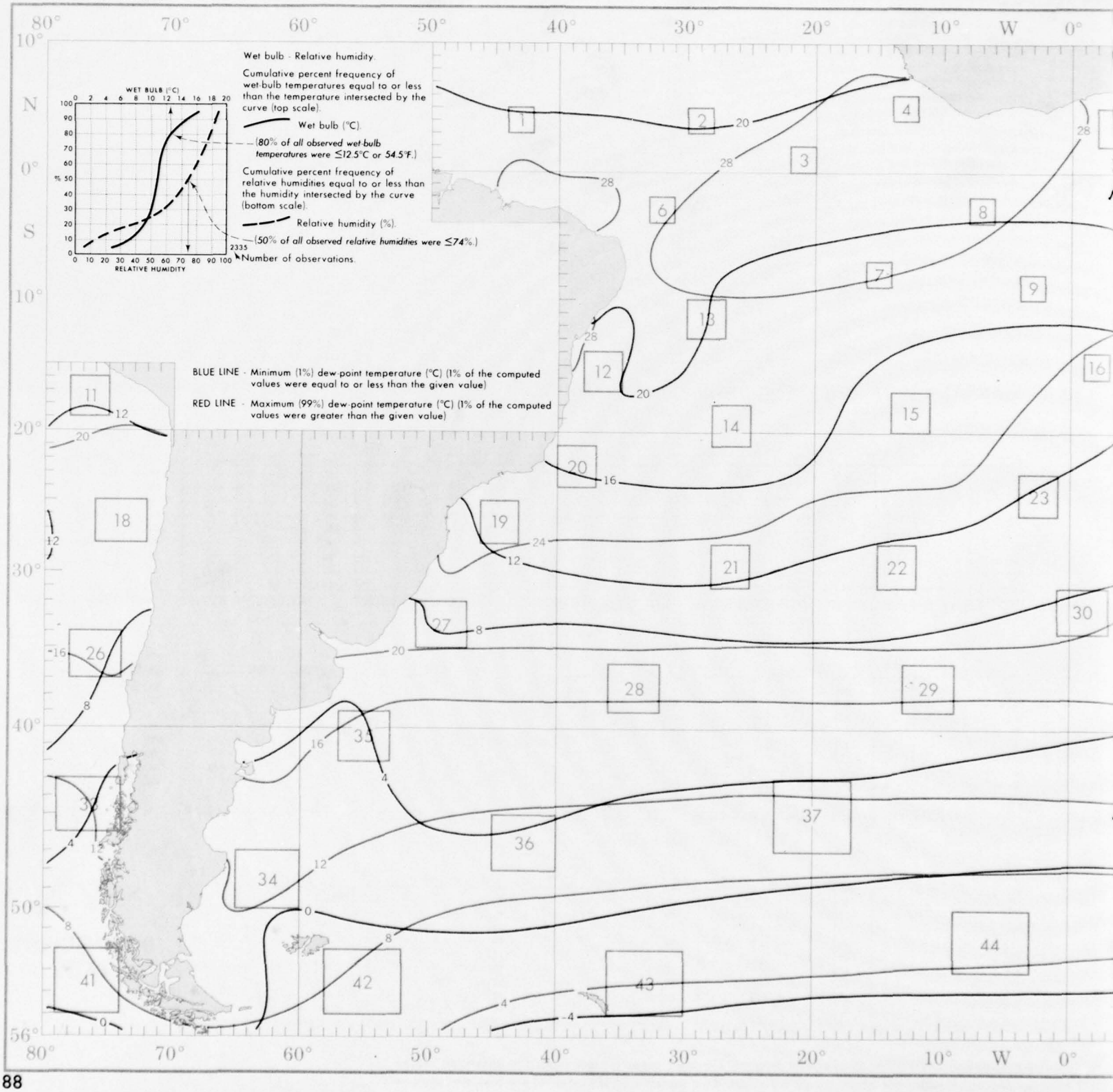
AD-A072 500 NAVAL AIR SYSTEMS COMMAND WASHINGTON DC F/G 4/2
U. S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD. VOLUME IV. SOUTH--ETC(U)
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3 OF 7
AD A072500

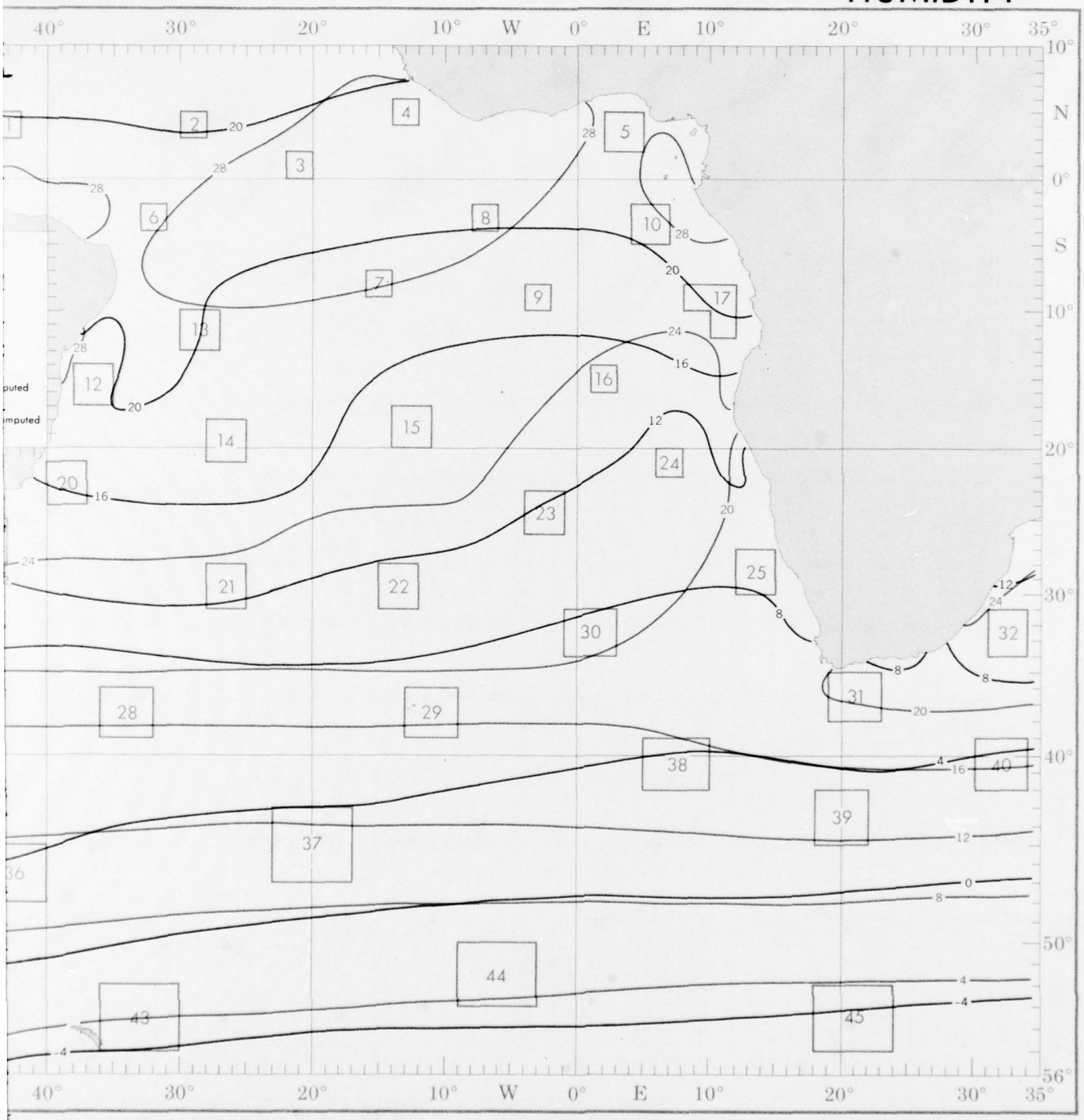



1.0
1.1
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

APRIL

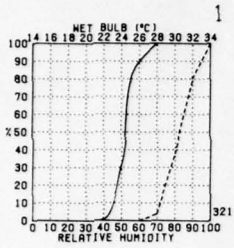

Wet bulb - Relative humidity.
Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).
Wet bulb (°C).
(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)
Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).
Relative humidity (%).
(50% of all observed relative humidities were ≤74%.)
2335 Number of observations.
WET BULB (°C)
RELATIVE HUMIDITY
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

HUMIDITY

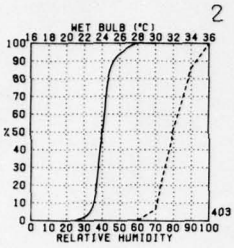

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 37 38 39 40 43 44 45
20 28 24 16 12 8 4 0 -4
puted
mputed

WET BULB AND RELATIVE HUMIDITY

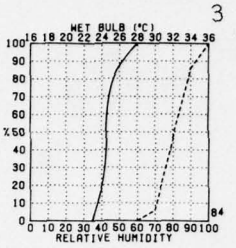
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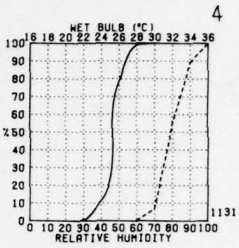
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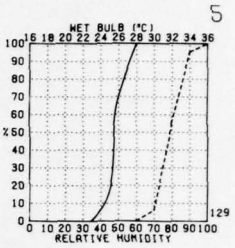
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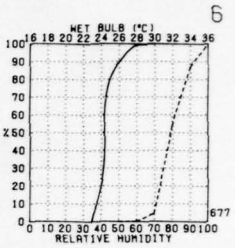
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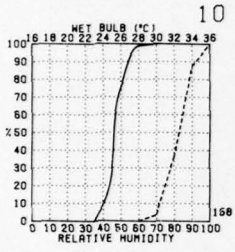
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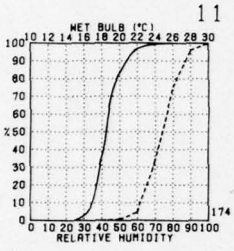
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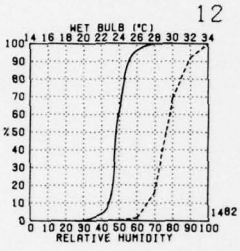
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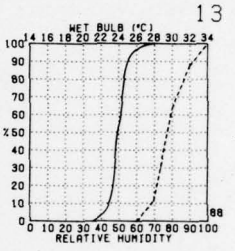
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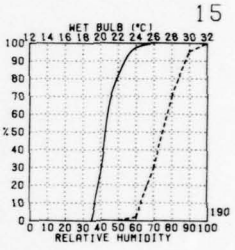
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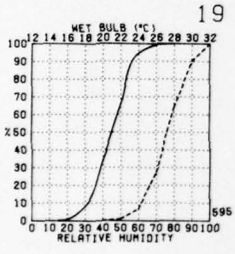
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INSUFFICIENT DATA

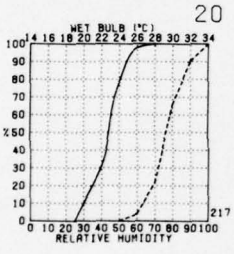
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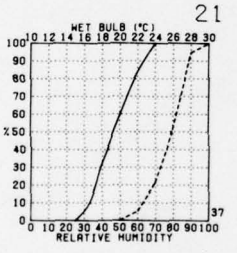
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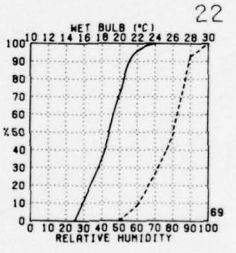
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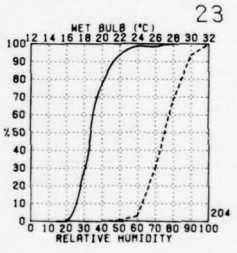
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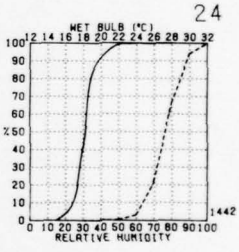
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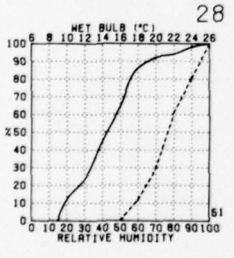
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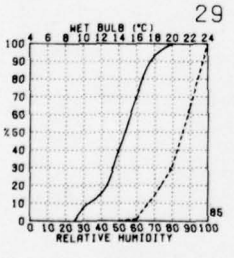
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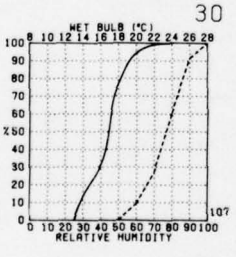
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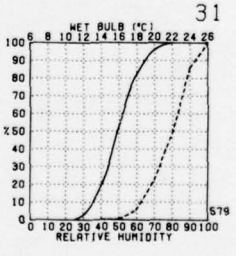
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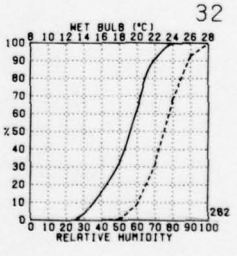
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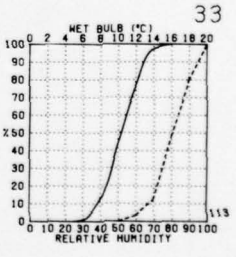
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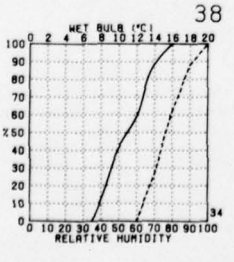
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INSUFFICIENT DATA

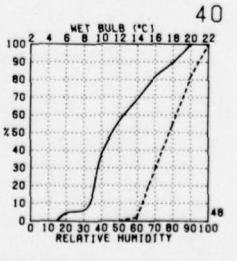
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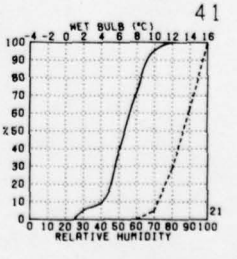
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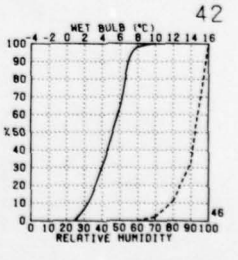
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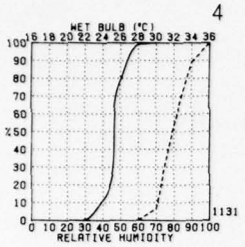


Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

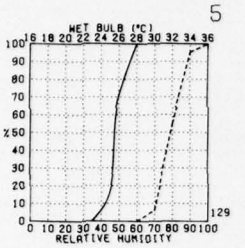
HUMIDITY

APRIL

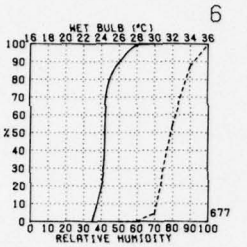
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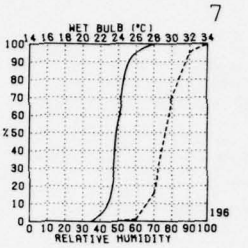
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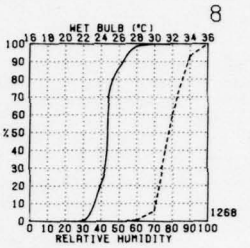
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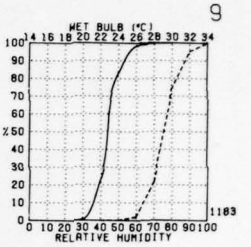
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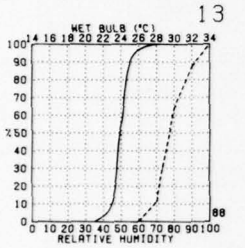
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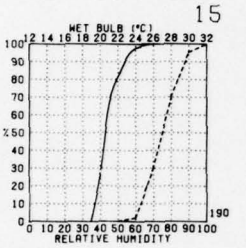
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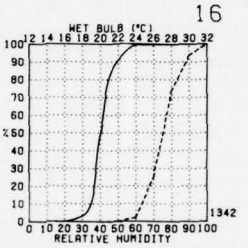
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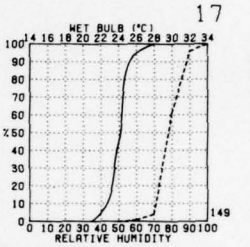
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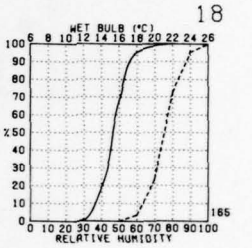
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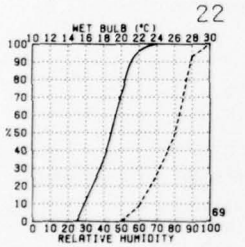
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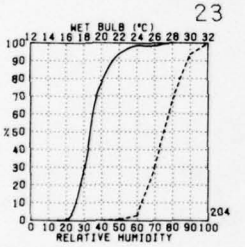
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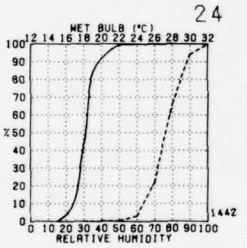
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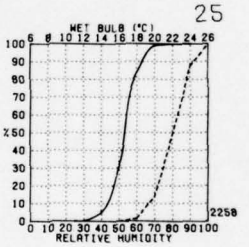
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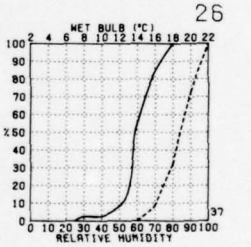
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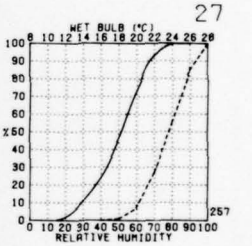
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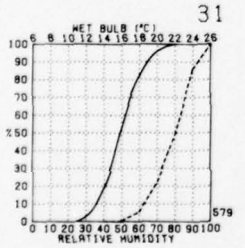
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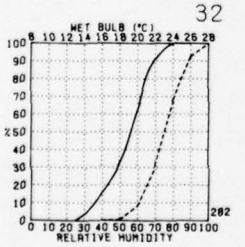
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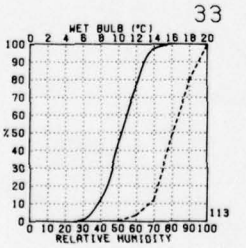
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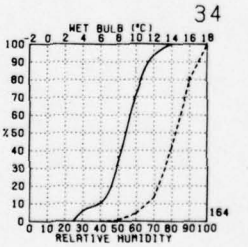
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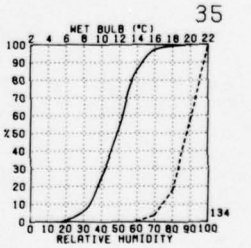
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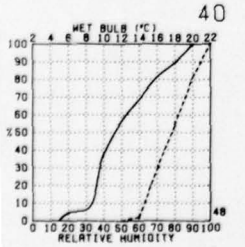
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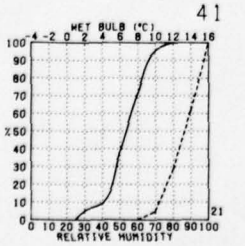
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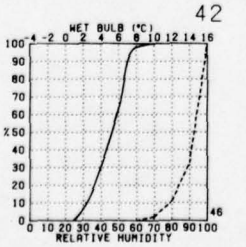
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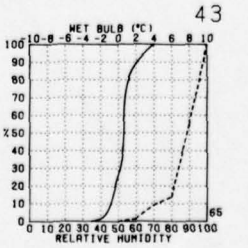
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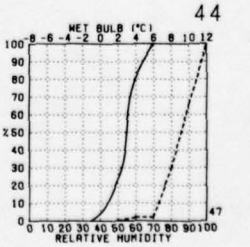
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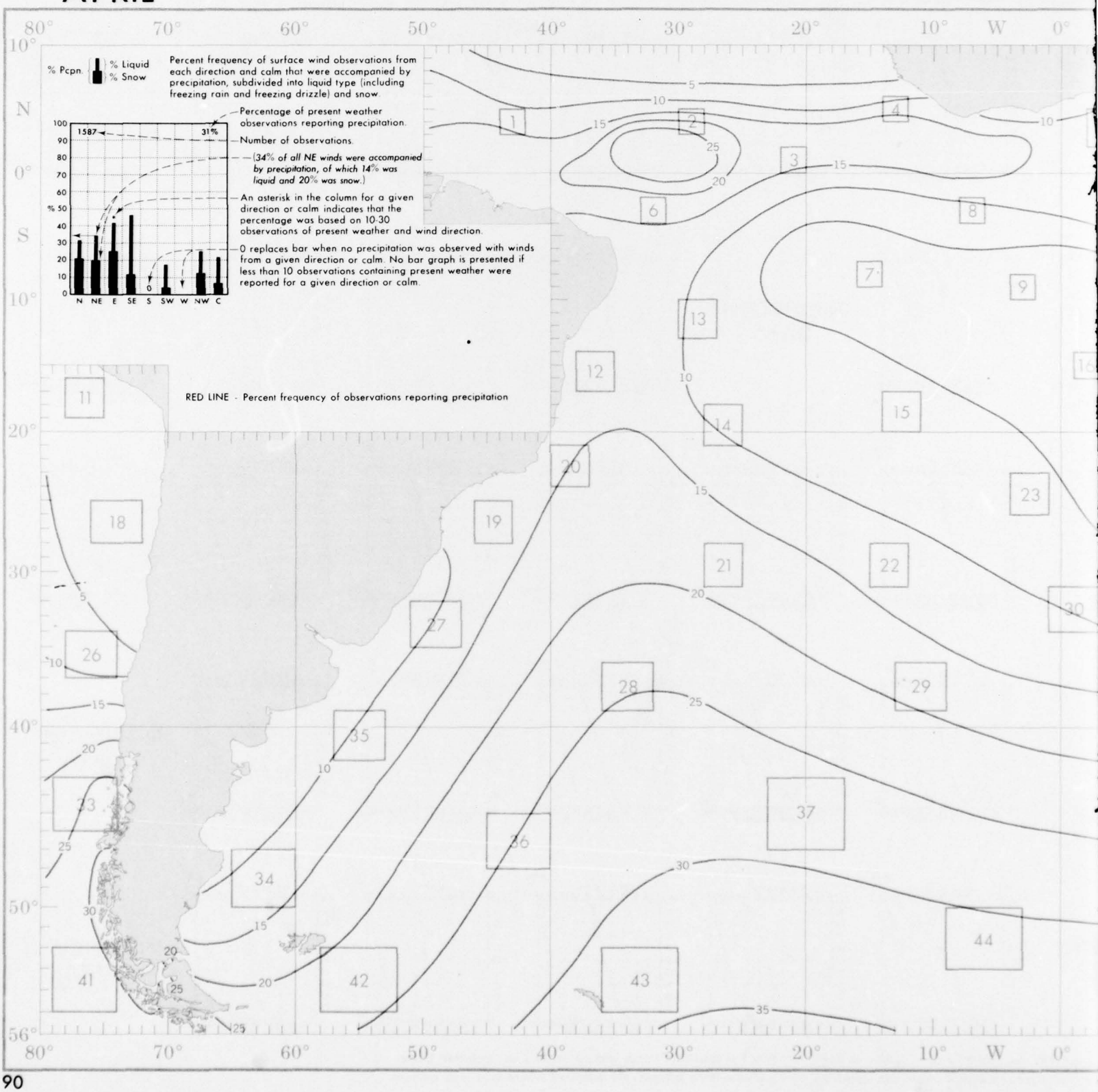


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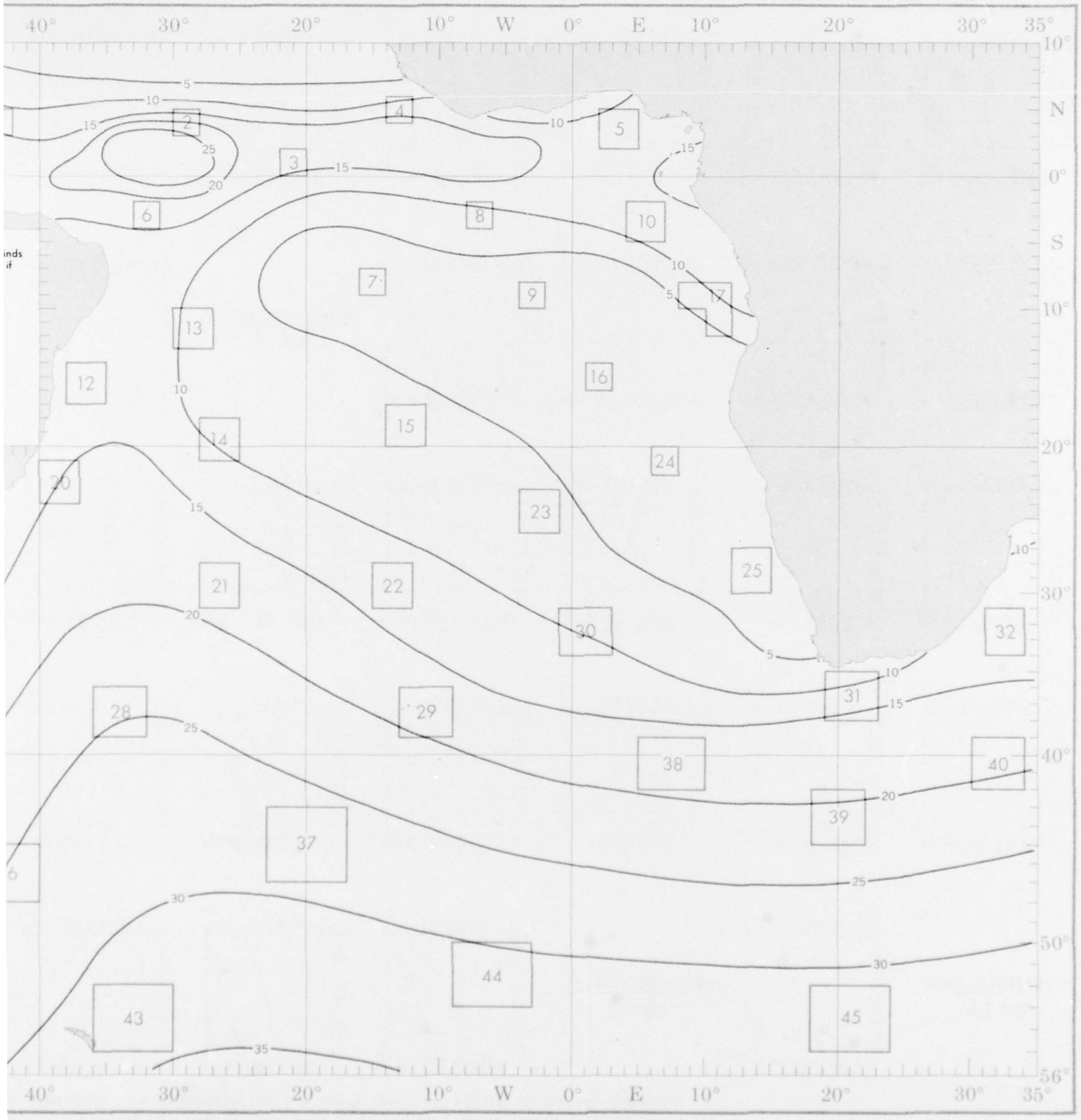
INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

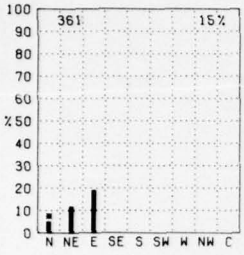
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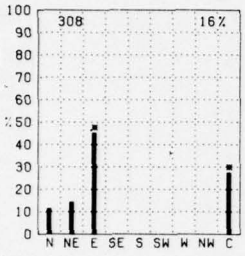

% Pcpn.
% Liquid
% Snow
Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.
Percentage of present weather observations reporting precipitation.
Number of observations.
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)
An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.
1587
31%
N NE E SE S SW W NW C
RED LINE - Percent frequency of observations reporting precipitation
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

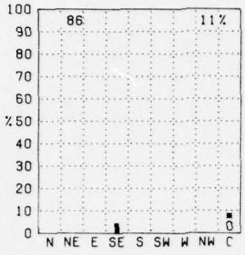
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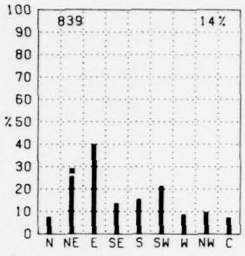


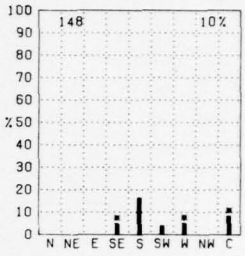
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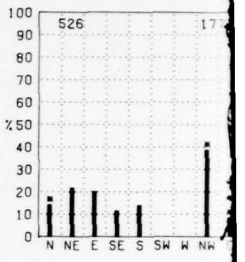


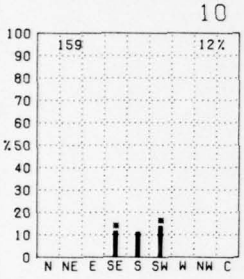


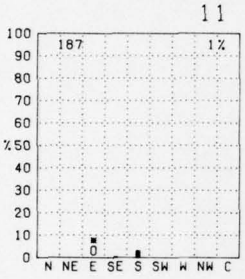


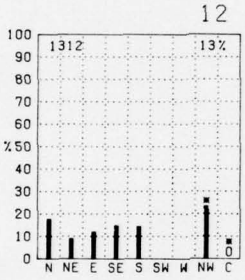


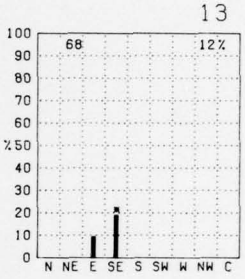






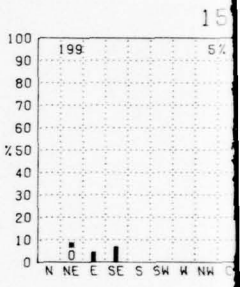


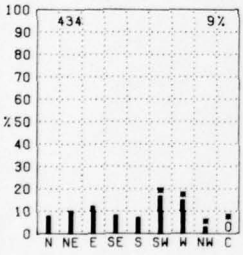


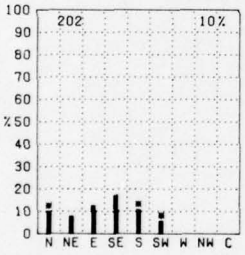


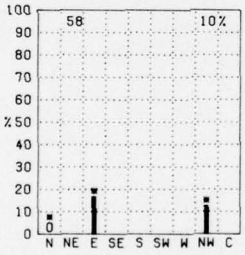
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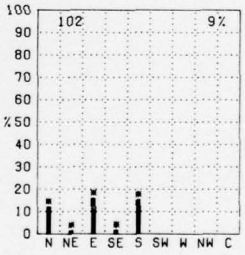
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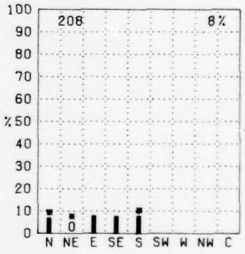


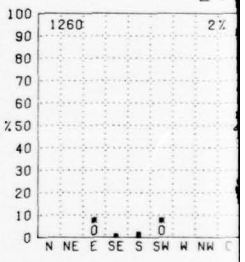


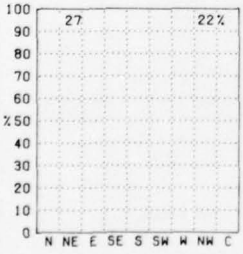


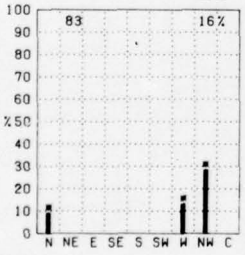


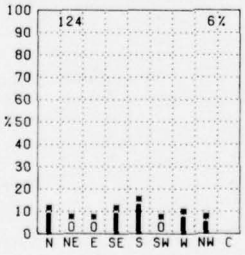


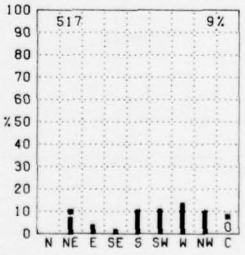


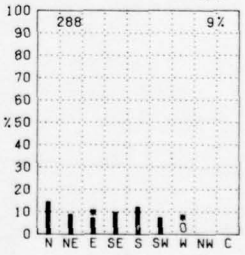


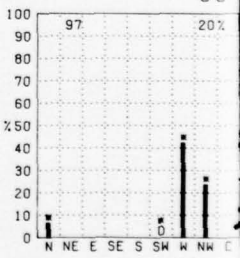






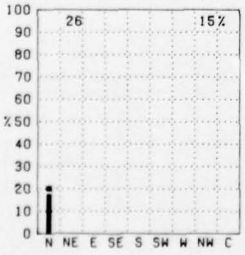






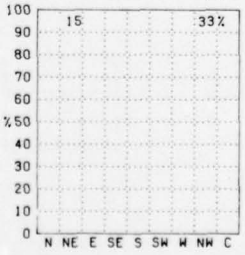
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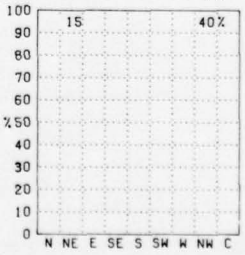
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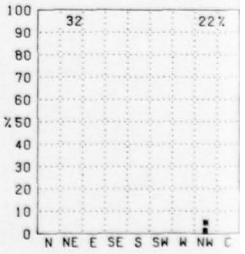


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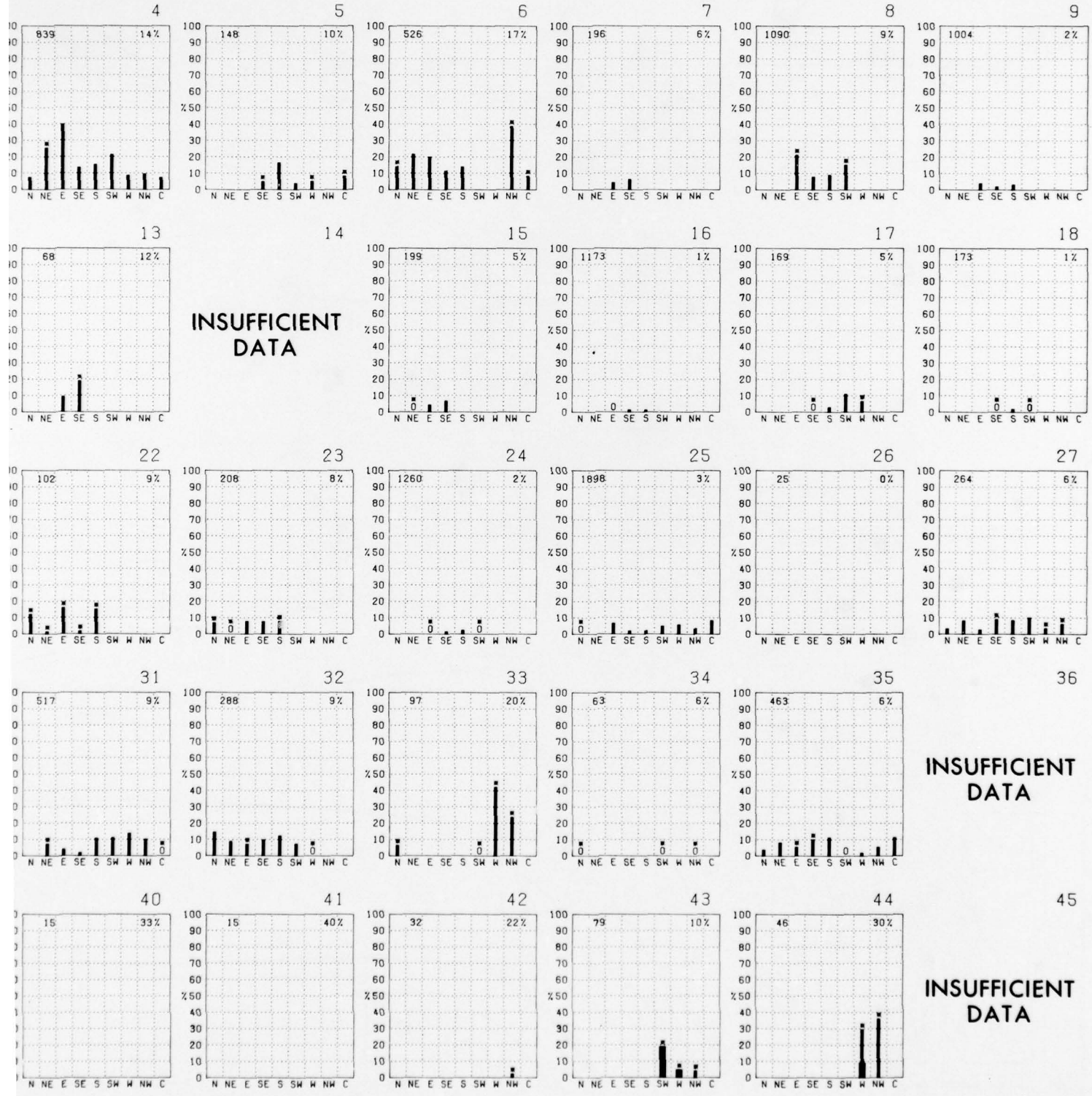






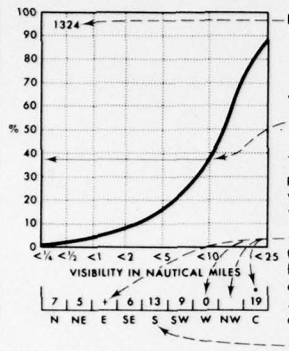
Graphs represent the objective compilation of available data for specified areas without regard
The isopleth analyses (opposite page) are based on all available data subjectively adjusted whe

APRIL



objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of *all visibilities reported were <10 nautical miles.*)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

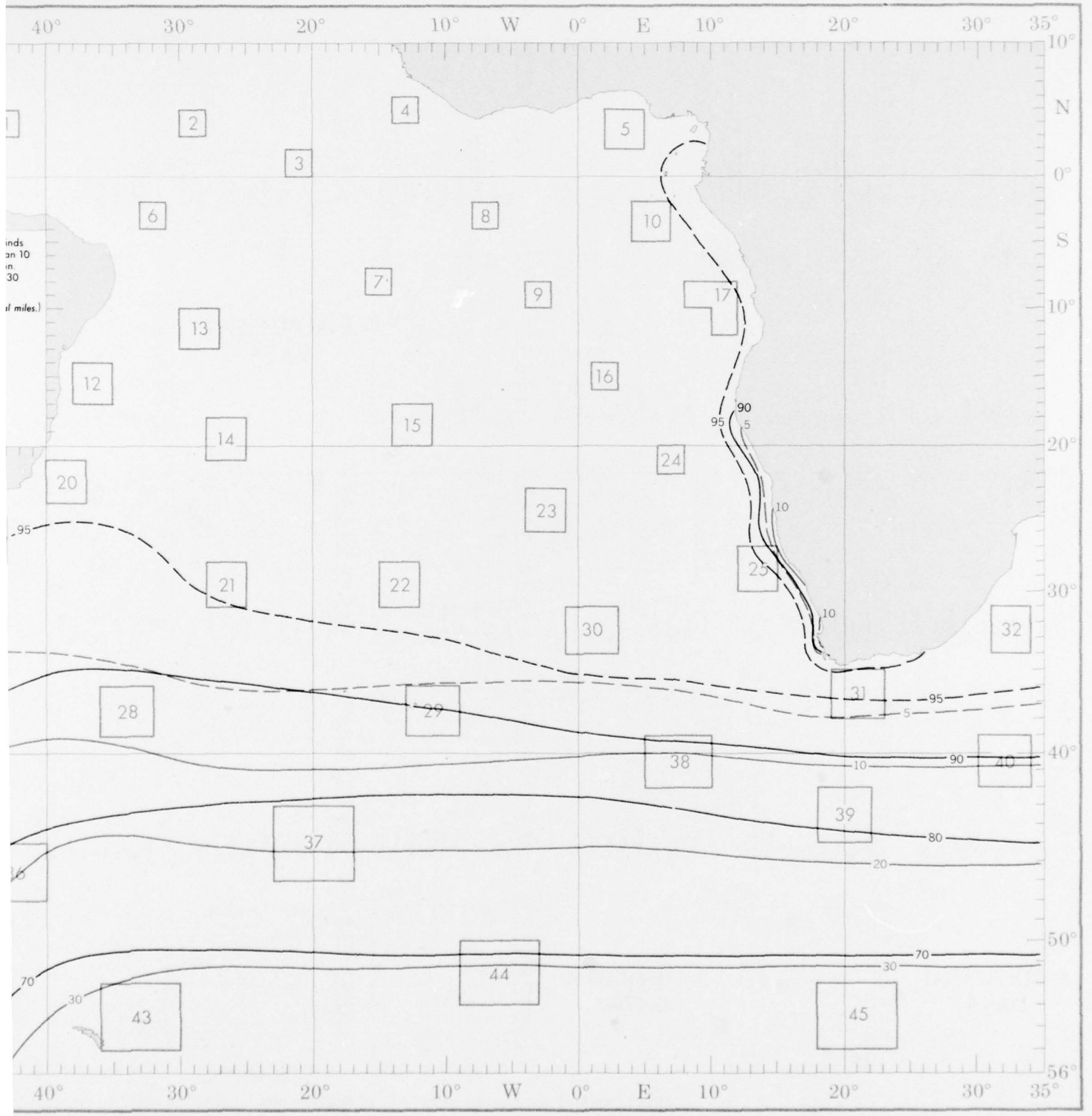
+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of *all S winds were accompanied by visibilities <2 nautical miles.*)

BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

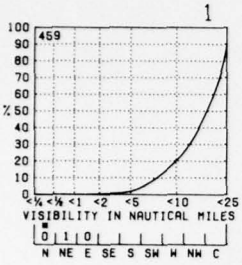
RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

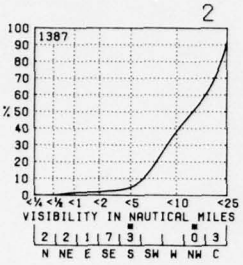

40°
30°
20°
10°
W
0°
E
10°
20°
30°
35°
10°
N
0°
S
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20°
30°
40°
50°
56°
1
2
3
4
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VISIBILITY

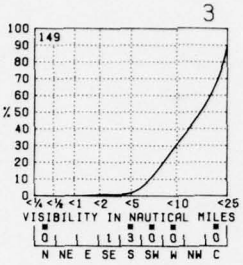
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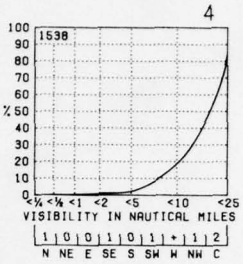
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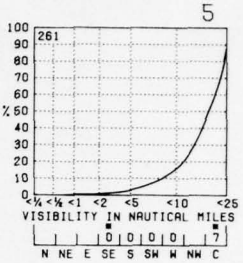
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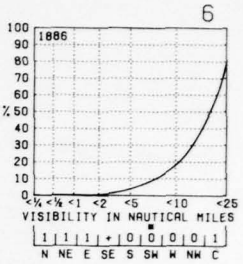
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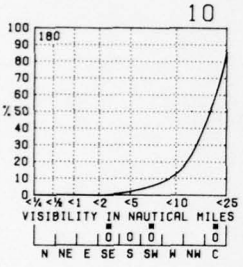
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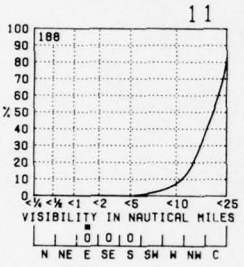
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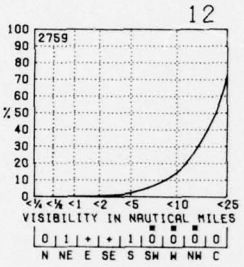
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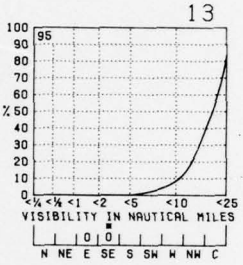
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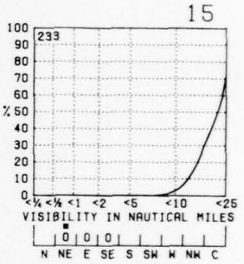
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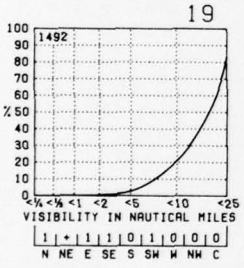
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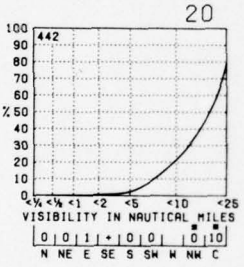
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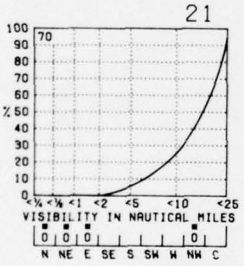
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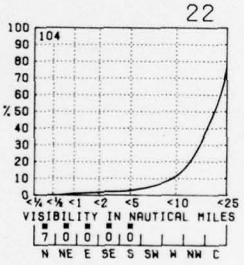
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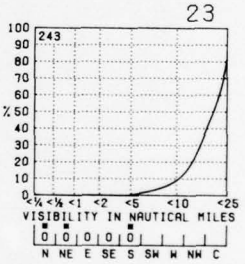
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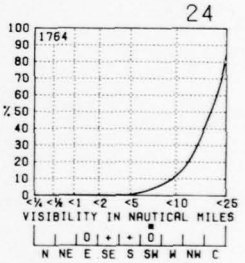
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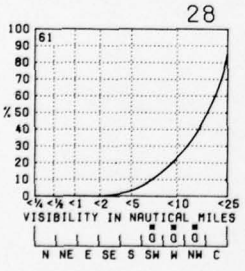
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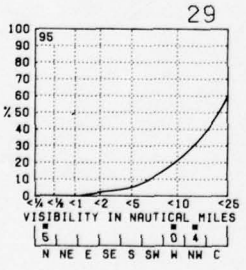
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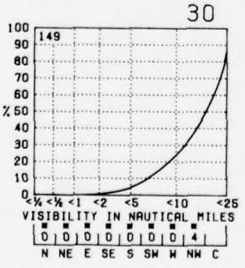
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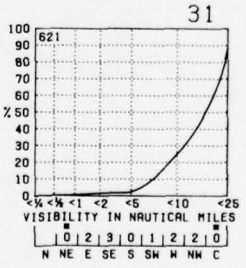
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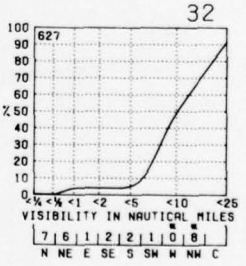
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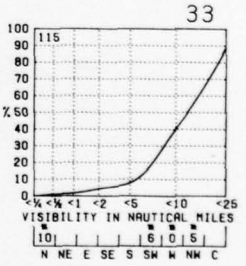
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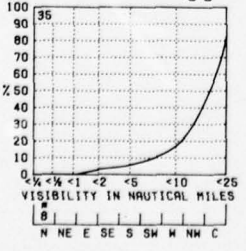
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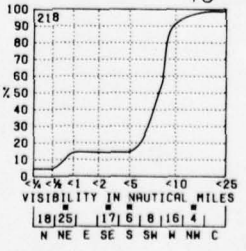
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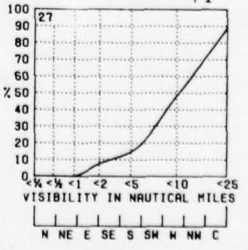
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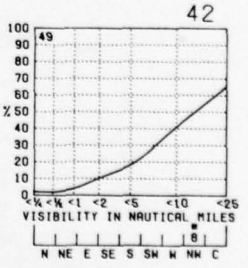
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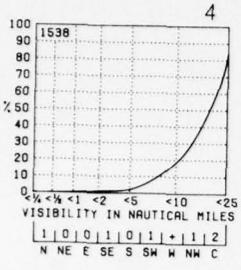
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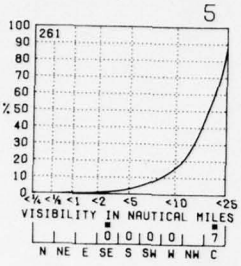


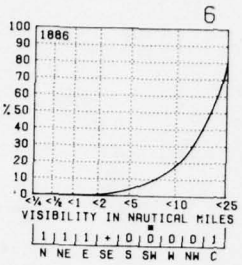
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

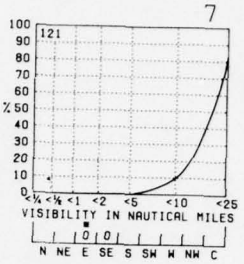
APRIL

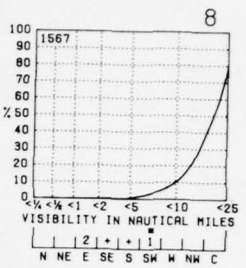


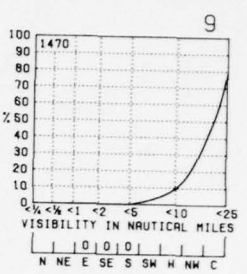




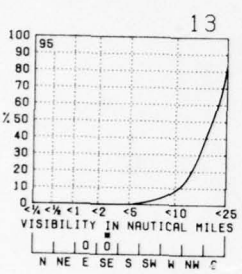






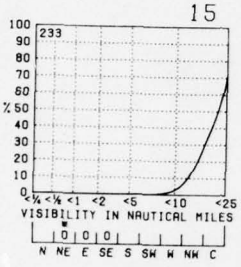


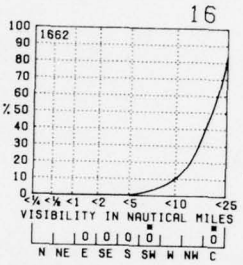


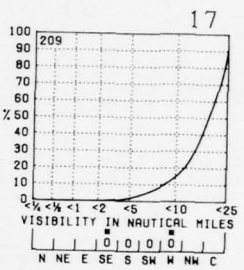


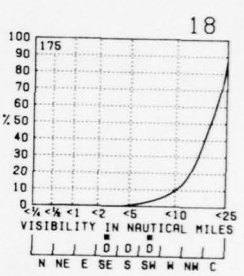
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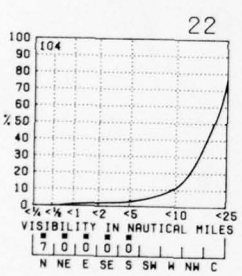


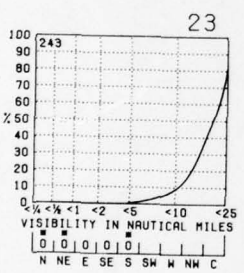


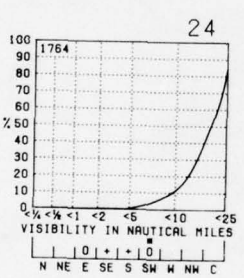


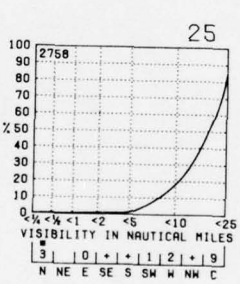


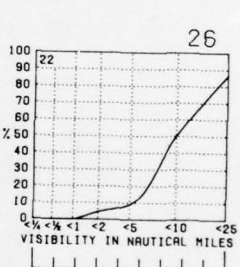


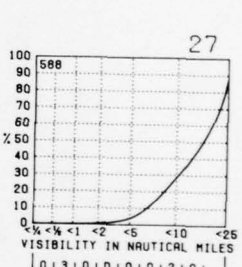


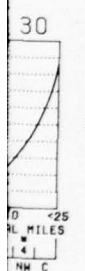


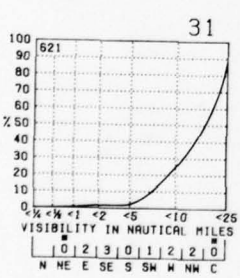


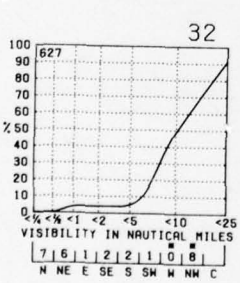


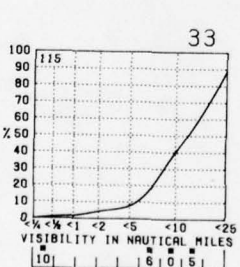


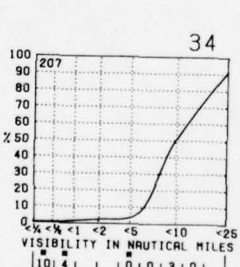


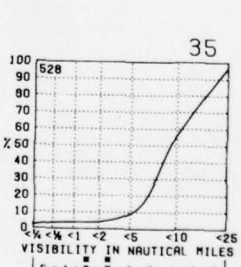


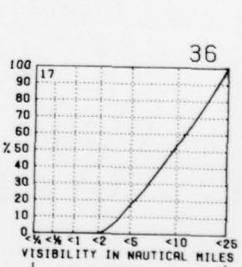


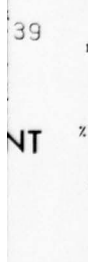


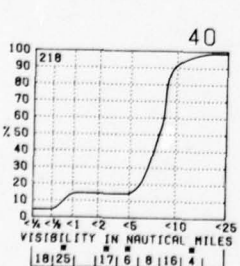


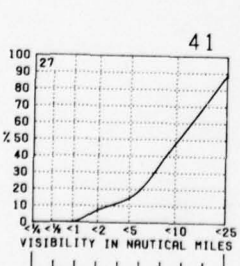


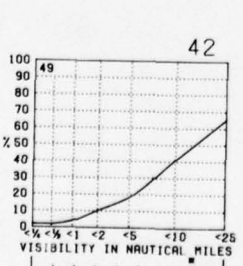


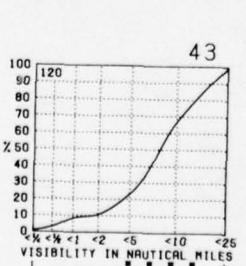


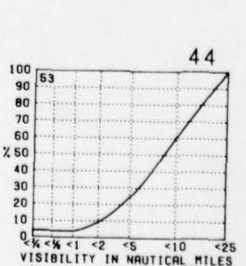










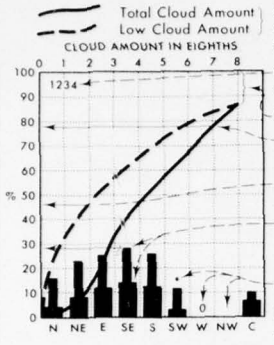


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INSUFFICIENT DATA

esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

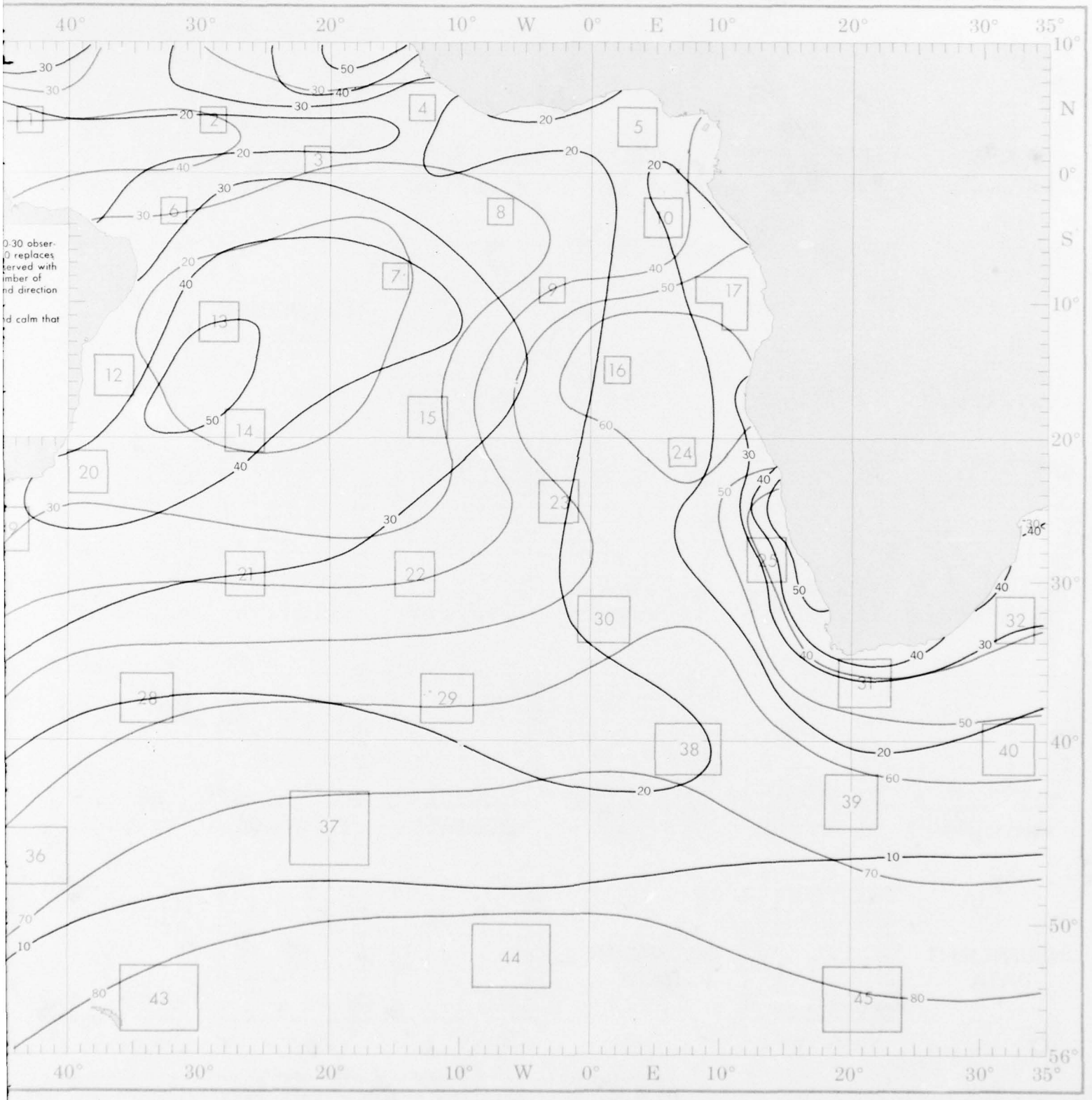
≥5/8 — 5/8 & 6/8 — ≥7/8

Low cloud amount. Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

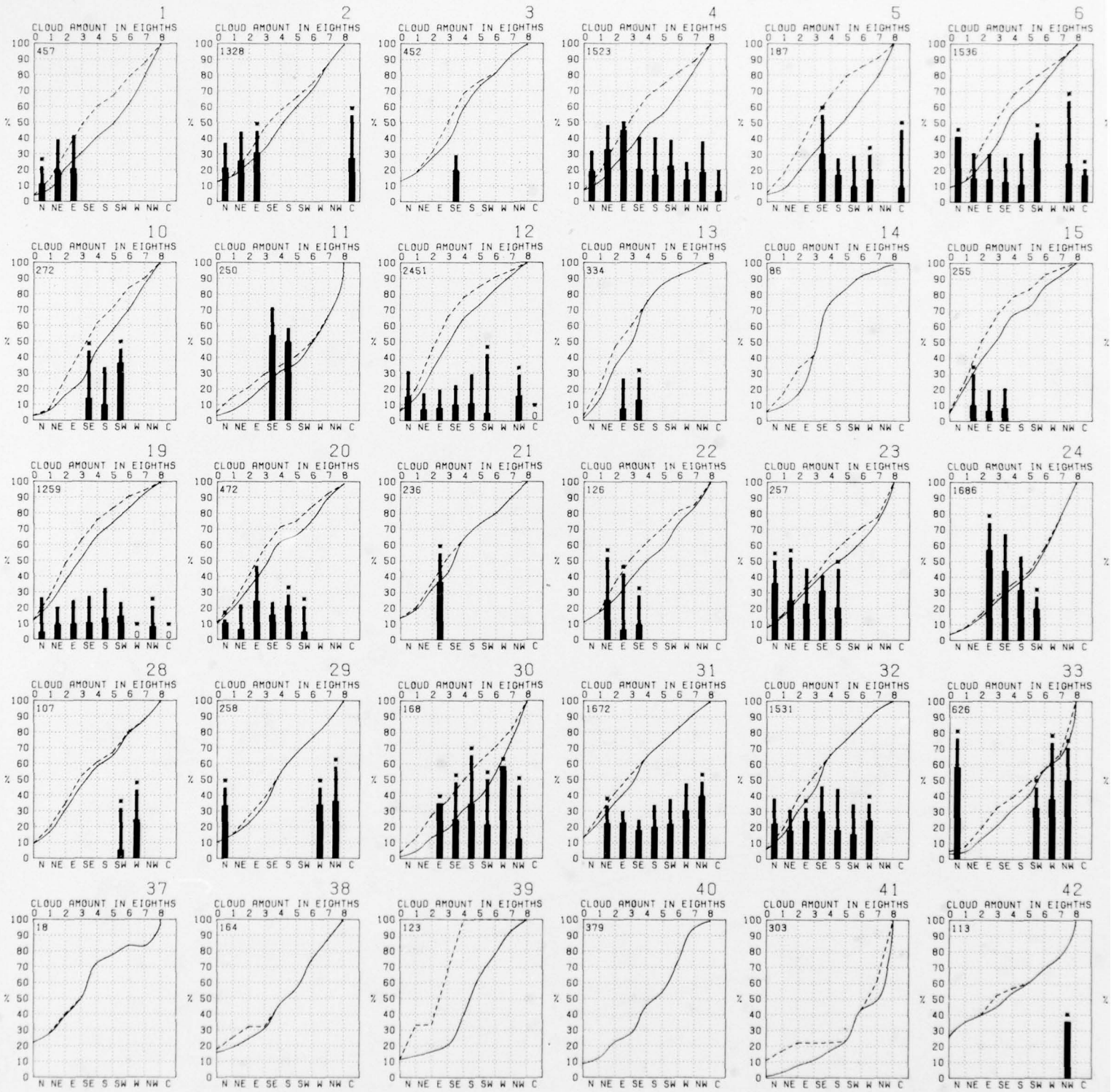
BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

CLOUD COVER


40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
10 20 30 40 50 60 70 80
0-30 obser-
0 replaces
served with
mber of
nd direction
d calm that

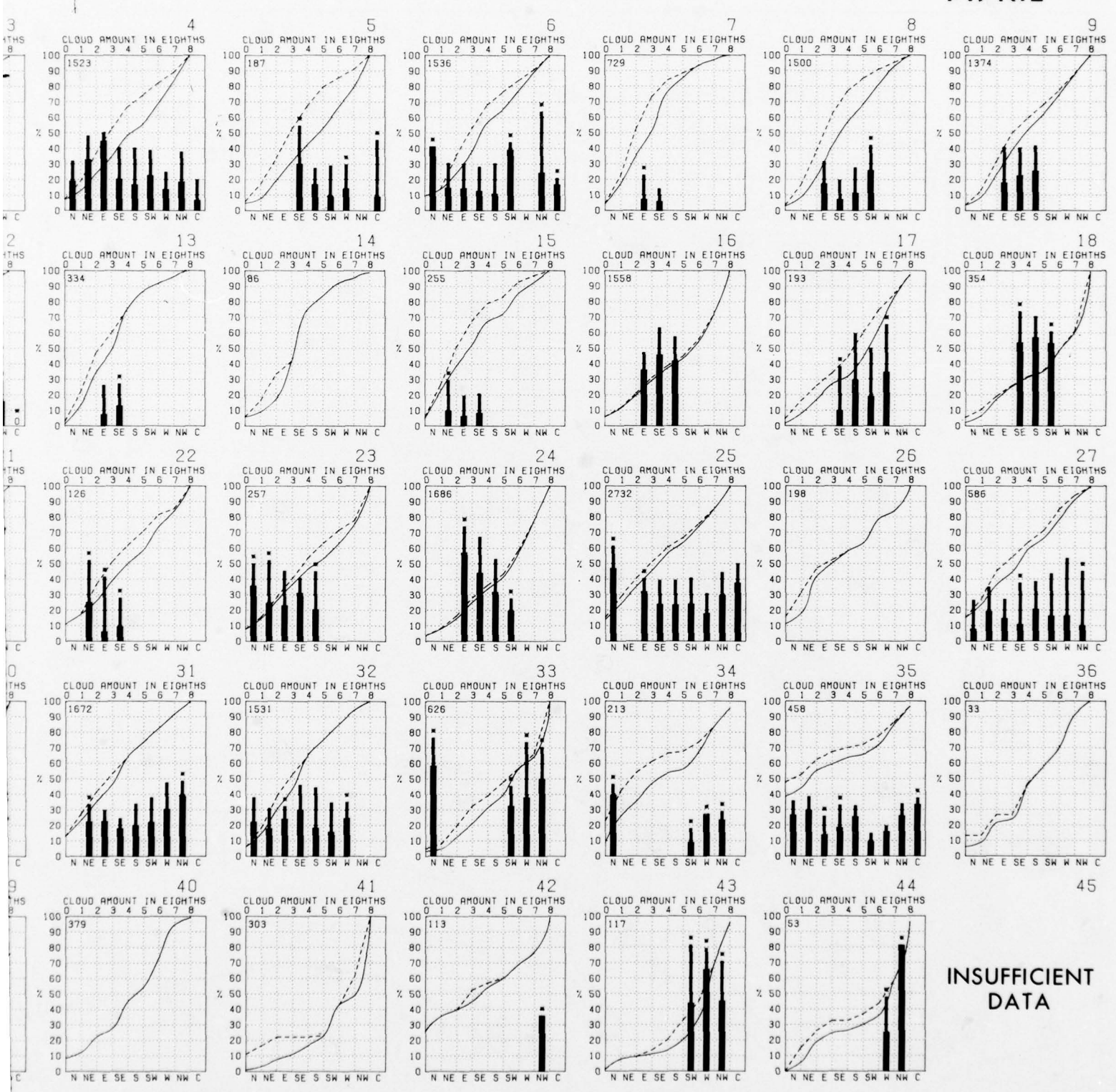
CLOUD COVER



Graphs represent the objective compilation of available data for specified areas without regard to

The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

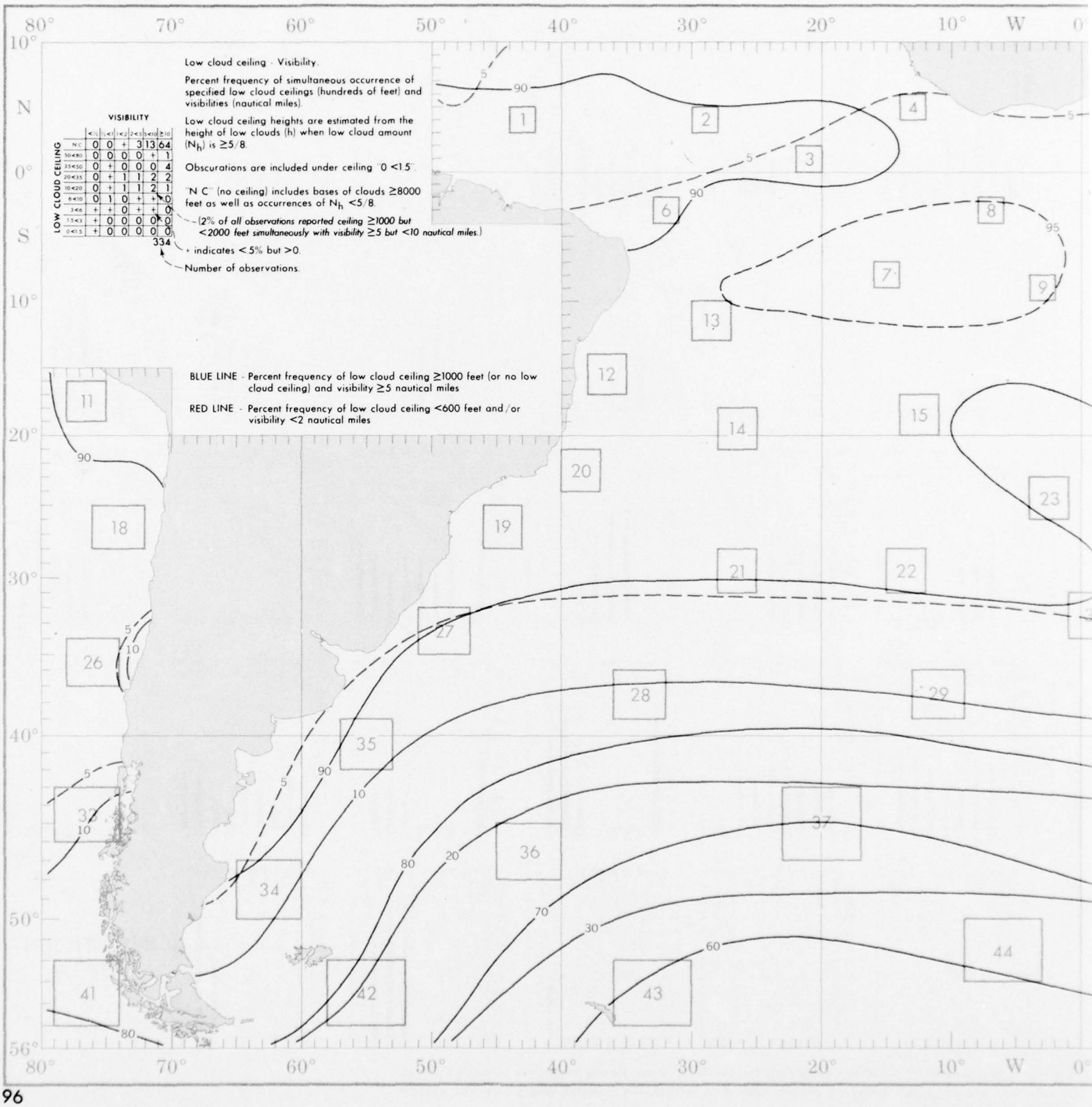
APRIL



INSUFFICIENT DATA

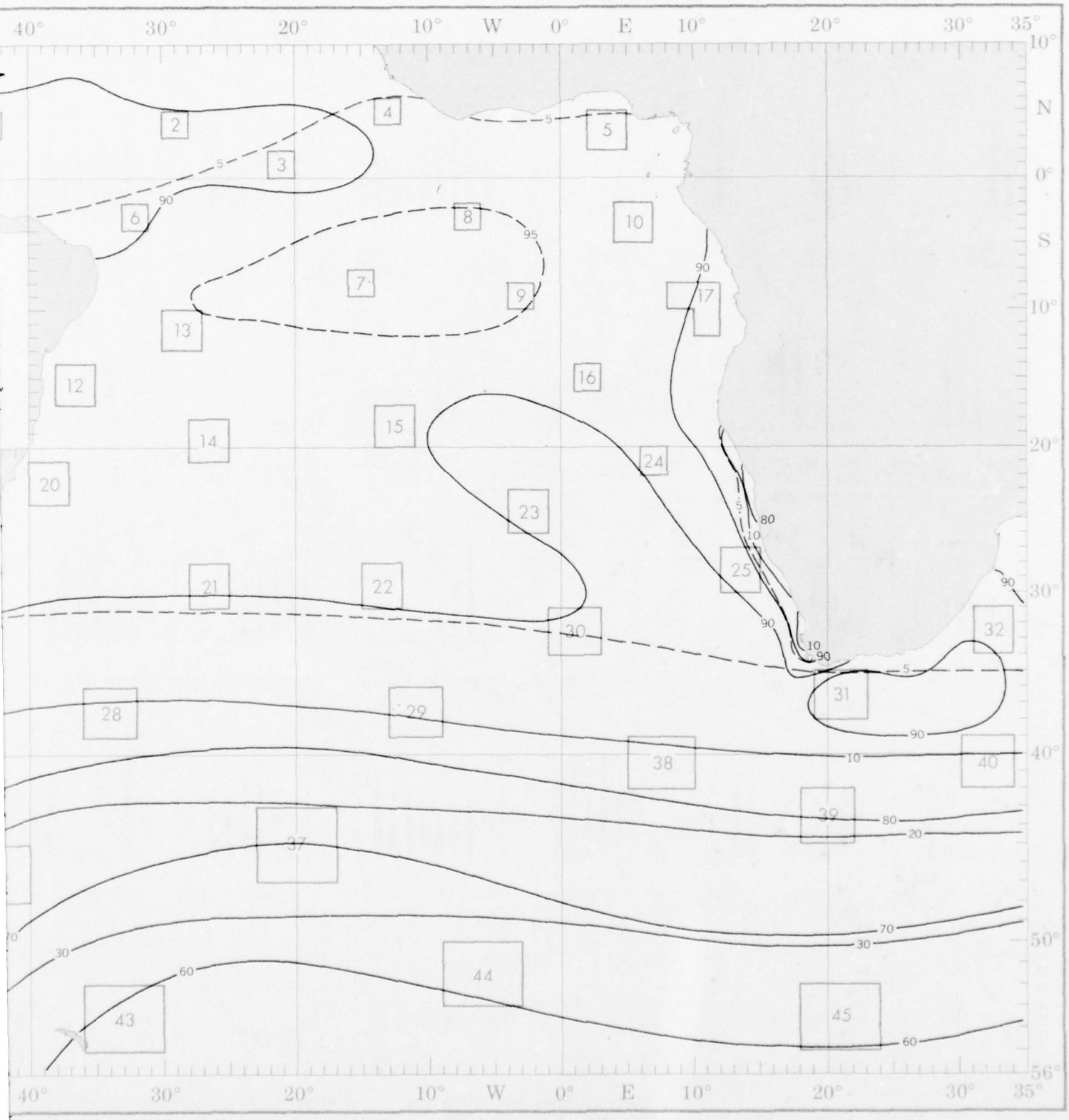
nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL



LOW CLOUD CEILING	<½	½–<1	1–<2	2–<5	5–<10	≥10
N C	0	0	+	3	13	64
50–<80	0	0	0	0	+	1
35–<50	0	+	0	0	0	4
20–<35	0	+	1	1	2	2
10–<20	0	+	1	1	2	1
5–<10	0	1	0	+	+	0
3–<5	+	+	0	+	+	0
1.5–<3	+	0	0	0	0	0
0–<1.5	+	0	0	0	0	0

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	+	0	3	59
50<80	0	0	0	0	1	+
35<50	0	0	0	0	+	3
20<35	0	0	0	0	1	3
10<20	0	0	0	+	4	10
6<10	0	0	0	0	2	9
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	+	1
0<1.5	0	0	0	1	0	0

340

2

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	7	51
50<80	0	0	+	0	+	1
35<50	0	0	0	0	1	4
20<35	0	0	0	0	2	5
10<20	0	0	0	+	3	16
6<10	0	0	0	0	2	4
3<6	0	0	0	+	0	+
1.5<3	0	0	+	0	+	0
0<1.5	0	0	0	0	0	+

344

3

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	0	71
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	4
10<20	0	0	0	1	1	11
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

76

4

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	66
50<80	0	0	+	0	0	1
35<50	0	0	0	+	+	2
20<35	0	0	+	+	1	7
10<20	+	0	0	+	1	10
6<10	0	0	0	+	1	4
3<6	0	0	+	0	1	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1015

5

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	68
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	8
10<20	0	0	0	0	2	10
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

145

6

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	66
50<80	0	0	0	+	0	1
35<50	0	0	0	+	1	2
20<35	+	0	0	+	1	5
10<20	0	0	0	+	2	10
6<10	0	0	0	1	3	4
3<6	0	+	0	0	1	1
1.5<3	0	0	0	0	+	0
0<1.5	+	0	0	0	0	0

589

10

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	59
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	1	3	7
10<20	0	0	0	1	3	13
6<10	0	0	0	0	1	4
3<6	0	0	0	1	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

157

11

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	32
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	4
20<35	0	0	0	0	3	16
10<20	0	0	0	0	3	24
6<10	0	0	0	0	0	12
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

146

12

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	2	76
50<80	0	0	0	+	0	+
35<50	+	0	0	+	+	2
20<35	+	0	0	+	1	3
10<20	0	0	+	+	2	6
6<10	0	0	0	+	1	5
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	+	0
0<1.5	+	0	0	0	0	+

1398

13

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	72
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	6
20<35	0	0	0	0	0	4
10<20	0	0	0	0	1	6
6<10	0	0	0	0	1	3
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

67

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	78
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	3
10<20	0	0	0	0	1	9
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

180

19

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	71
50<80	0	0	0	0	1	1
35<50	0	0	0	0	+	3
20<35	0	0	+	+	1	4
10<20	0	0	0	0	1	5
6<10	0	0	0	+	2	4
3<6	0	0	+	0	1	+
1.5<3	0	0	0	0	0	0
0<1.5	+	0	0	0	0	0

477

20

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	68
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	1
20<35	0	0	0	0	1	5
10<20	0	+	0	0	2	8
6<10	0	0	0	0	1	2
3<6	0	0	0	+	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	0

210

21

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	5	12
10<20	0	0	0	2	5	17
6<10	0	0	0	0	0	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

42

22

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	59
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	4
20<35	0	0	0	0	0	10
10<20	0	0	0	0	0	12
6<10	0	0	0	0	1	5
3<6	0	0	1	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

73

23

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	8
10<20	0	0	0	0	2	21
6<10	0	0	0	0	2	10
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	1	0

188

24

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	36
50<80	0	0	0	+	+	2
35<50	0	0	0	0	+	6
20<35	0	0	0	+	1	16
10<20	0	0	0	+	3	28
6<10	0	0	0	+	1	7
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1321

28

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	12	45
50<80	0	0	0	0	2	7
35<50	0	0	0	0	2	5
20<35	0	0	0	0	0	5
10<20	0	0	0	0	5	10
6<10	0	0	0	0	2	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

42

29

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	46
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	1
10<20	0	0	0	1	0	30
6<10	0	0	0	1	1	4
3<6	0	0	0	0	4	0
1.5<3	0	0	0	0	1	0
0<1.5	0	0	1	1	0	0

81

30

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	47
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	1	0	0	9
10<20	0	0	0	0	3	23
6<10	0	0	0	2	4	2
3<6	0	0	0	1	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

105

31

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	59
50<80	0	0	0	0	0	+
35<50	0	0	0	+	1	3
20<35	0	0	0	0	1	8
10<20	0	0	0	+	4	10
6<10	0	0	0	0	2	5
3<6	0	0	+	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	+	0	0	+	0

347

32

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	60
50<80	0	0	0	0	+	+
35<50	0	0	0	0	0	1
20<35	0	0	0	0	3	5
10<20	0	0	0	1	2	11
6<10	+	0	0	+	4	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

278

33

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	33
50<80	0	0	0	0	0	0
35<50	0	0	0	0	4	1
20<35	0	0	0	1	3	4
10<20	0	0	1	0	3	21
6<10	0	0	0	1	6	4
3<6	0	0	1	2	2	2
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	0	1

96

37

INSUFFICIENT DATA

38

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	48
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	4
20<35	0	0	0	0	0	4
10<20	0	0	0	4	7	26
6<10	0	0	0	0	0	4
3<6	0	0	4	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

27

39

INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	17
50<80	0	0	0	0	0	0
35<50	0	0	0	6	0	17
20<35	0	0	0	0	0	11
10<20	0	0	0	0	6	17
6<10	0	0	0	0	11	11
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	6	0	0	0	0	0

18

41

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	27
50<80	0	0	0	0	0	7
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	7	27
6<10	0	0	0	0	0	13
3<6	0	0	0	0	20	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

42

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	8
20<35	0	0	0	0	8	3
10<20	0	0	0	3	3	5
6<10	0	3	3	5	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	0	0

39

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

APRIL

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	66
50<80	0	0	+	0	0	1
35<50	0	0	0	+	+	2
20<35	0	0	+	+	1	7
10<20	+	0	0	+	1	10
6<10	0	0	0	+	1	4
3<6	0	0	+	0	1	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1015

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	68
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	8
10<20	0	0	0	0	2	10
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

145

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	66
50<80	0	0	0	+	0	1
35<50	0	0	0	+	1	2
20<35	+	0	0	+	1	5
10<20	0	0	0	+	2	10
6<10	0	0	0	1	3	4
3<6	0	+	0	0	1	1
1.5<3	0	0	0	0	+	0
0<1.5	+	0	0	0	0	0

589

7

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	80
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	5
10<20	0	0	0	0	3	4
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

111

8

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	76
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	0	0	+	5
10<20	0	0	0	+	1	8
6<10	+	+	+	+	+	4
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	0	0

1151

9

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	59
50<80	0	0	0	0	0	2
35<50	0	0	0	0	+	4
20<35	0	0	0	0	+	10
10<20	0	0	0	0	+	18
6<10	0	0	0	0	+	5
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1064

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	72
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	6
20<35	0	0	0	0	0	4
10<20	0	0	0	0	1	6
6<10	0	0	0	0	1	3
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

67

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	78
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	3
10<20	0	0	0	0	1	9
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

180

16

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	39
50<80	0	0	0	+	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	17
10<20	0	0	0	+	1	26
6<10	0	0	0	+	+	7
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1237

17

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	42
50<80	0	0	0	0	0	1
35<50	0	0	0	0	2	2
20<35	0	0	0	0	2	12
10<20	0	0	0	0	4	20
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	2	1	0

163

18

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	32
50<80	0	0	0	0	1	0
35<50	0	0	0	0	0	5
20<35	0	0	0	0	4	23
10<20	0	0	0	0	0	19
6<10	0	0	0	0	2	11
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	1	1	0

151

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	59
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	4
20<35	0	0	0	0	0	12
10<20	0	0	0	0	1	5
6<10	0	0	0	0	0	0
3<6	0	0	1	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

73

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	52
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	8
10<20	0	0	0	0	2	21
6<10	0	0	0	0	2	10
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	1	0

188

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	36
50<80	0	0	0	+	+	2
35<50	0	0	0	0	+	6
20<35	0	0	0	+	1	16
10<20	0	0	0	+	3	28
6<10	0	0	0	0	1	7
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1321

25

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	6	56
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	8
10<20	0	0	0	+	2	15
6<10	0	0	0	+	1	5
3<6	0	0	+	+	+	1
1.5<3	0	0	0	+	0	+
0<1.5	+	+	0	0	+	+

1943

26

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	26	32
50<80	0	0	0	0	0	5
35<50	0	0	5	0	0	0
20<35	0	0	0	0	5	0
10<20	0	0	0	0	0	5
6<10	0	0	0	0	5	11
3<6	0	0	0	0	5	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

19

27

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	1	6	57
50<80	0	0	0	0	1	1
35<50	0	0	0	0	1	2
20<35	0	0	0	+	2	8
10<20	0	0	+	2	3	8
6<10	0	0	+	0	3	3
3<6	0	0	0	0	+	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

256

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	59
50<80	0	0	0	0	0	+
35<50	0	0	0	+	1	3
20<35	0	0	0	0	1	8
10<20	0	0	0	+	4	10
6<10	0	0	0	0	2	5
3<6	0	0	+	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	+	0	0	+	0

347

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	60
50<80	0	0	0	0	+	+
35<50	0	0	0	0	0	1
20<35	0	0	0	0	3	5
10<20	0	0	0	1	2	11
6<10	+	0	0	+	4	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

278

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	33
50<80	0	0	0	0	0	0
35<50	0	0	0	0	4	1
20<35	0	0	0	1	3	4
10<20	0	0	1	0	3	21
6<10	0	0	0	1	6	4
3<6	0	0	1	2	2	2
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	0	1

96

34

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	9	59
50<80	0	0	0	0	0	0
35<50	0	0	1	0	3	3
20<35	0	0	0	0	5	3
10<20	0	0	0	0	1	11
6<10	0	0	0	0	1	1
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	1	0	0	0

79

35

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	2	24	45
50<80	0	0	0	0	+	1
35<50	+	0	0	+	2	2
20<35	+	+	0	0	5	2
10<20	0	0	0	2	5	3
6<10	+	0	0	1	1	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	1	+	0

375

36

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	13	33
50<80	0	0	0	0	0	0
35<50	0	0	0	7	13	0
20<35	0	0	0	0	7	0
10<20	0	0	0	7	7	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	17
50<80	0	0	0	0	0	0
35<50	0	0	0	6	0	17
20<35	0	0	0	0	0	11
10<20	0	0	0	0	6	17
6<10	0	0	0	0	11	11
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	6	0	0	0	0	0

18

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	27
50<80	0	0	0	0	0	7
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	7	27
6<10	0	0	0	0	0	13
3<6	0	0	0	0	20	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	8
20<35	0	0	0	0	8	3
10<20	0	0	0	3	3	5
6<10	0	3	3	5	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	0	0

39

43

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	26
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	7
20<35	0	1	0	0	9	10
10<20	0	0	0	3	7	7
6<10	1	0	0	0	6	3
3<6	1	1	1	4	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	1	0	0	1

70

44

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	30
50<80	0	0	0	0	0	2
35<50	0	0	0	2	11	0
20<35	0	0	2	0	4	13
10<20	0	0	2	4	7	0
6<10	0	0	0	11	2	0
3<6	0	0	2	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	4	0	0	0	0	0

46

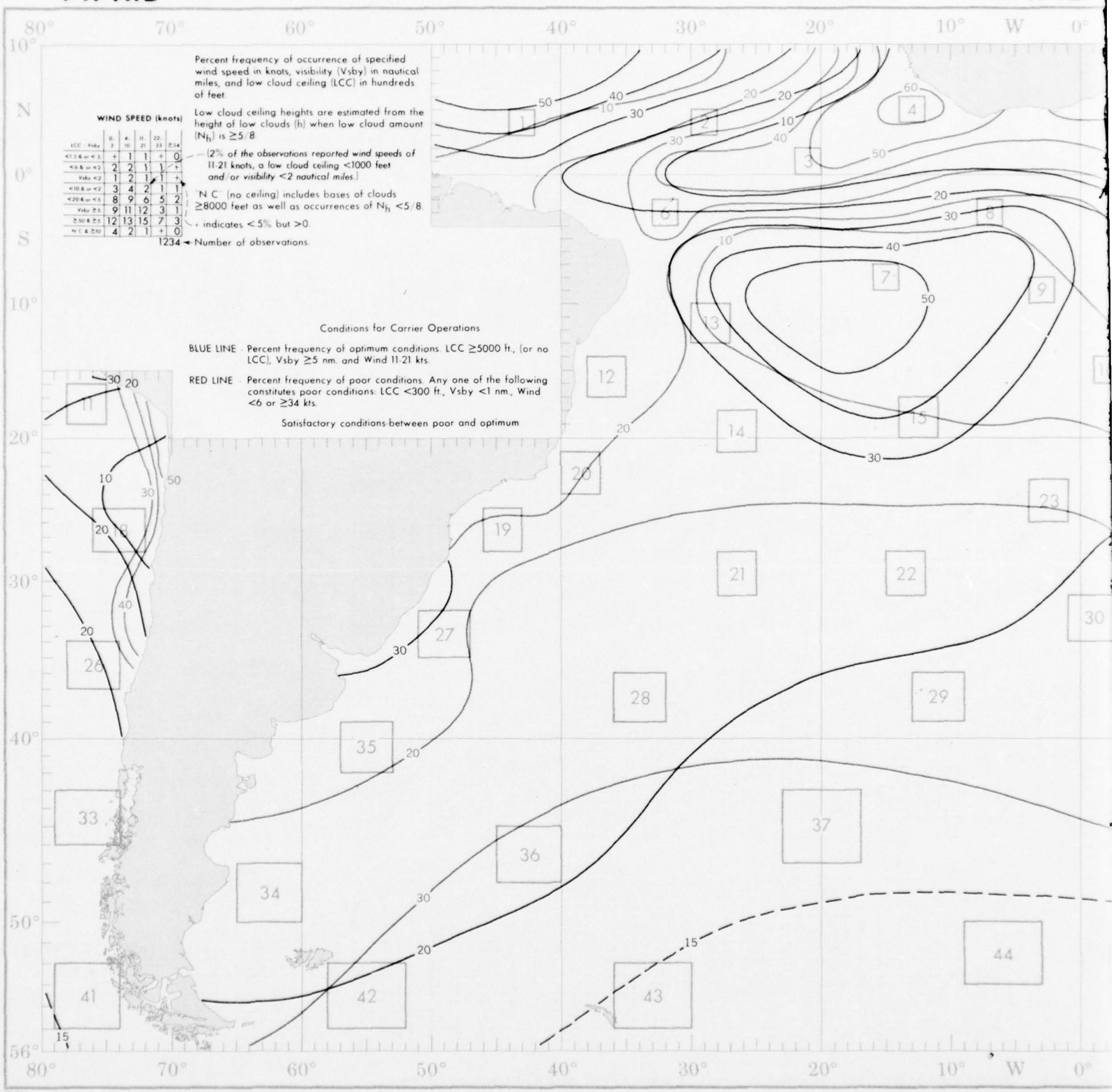
45

INSUFFICIENT DATA

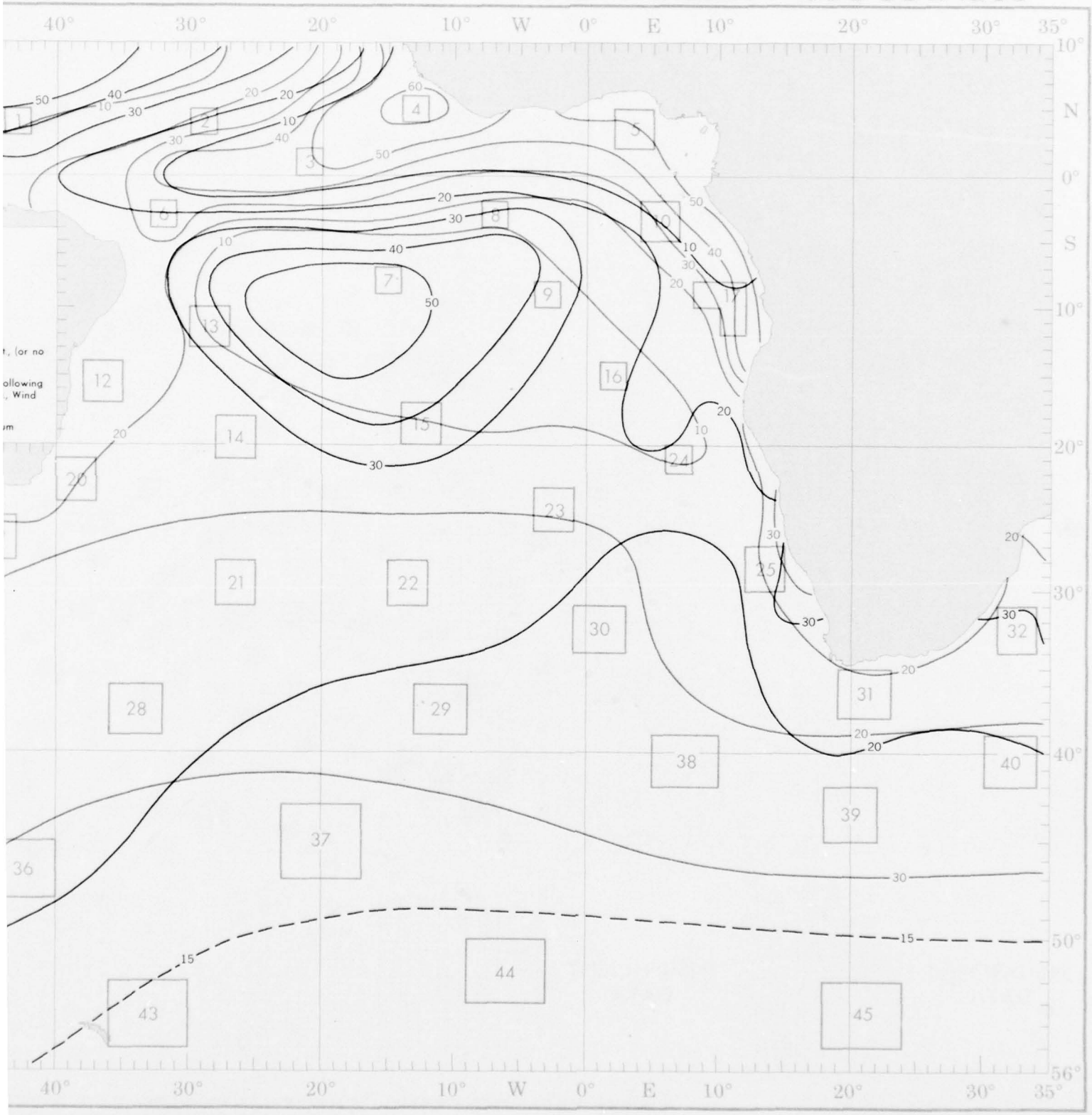
he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL

WIND-


Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
WIND SPEED (knots)
LCC - Vsby
0-3
4-10
11-21
22-33
≥34
<1.5 & or <.5
1
1
+
0
<5 & or <2
2
2
1
1
+
Vsby <2
1
2
1
1
+
<10 & or <2
3
4
2
1
1
<20 & or <5
8
9
6
5
2
Vsby ≥5
9
11
12
3
1
≥50 & ≥5
12
13
15
7
3
N.C. & ≥10
4
2
1
+
0
1234 ← Number of observations.
(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)
N.C. (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
+ indicates < 5% but >0.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions: LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions-between poor and optimum
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10° N
0°
S
10°
20°
30°
40°
50°
56°
1
2
3
4
6
7
8
9
11
12
13
14
15
19
20
21
22
23
26
27
28
29
30
33
34
35
36
37
41
42
43
44

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	4	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	3	13	1	0
<20 & OR <5	0	7	23	1	0
VSBY ≥5	1	27	68	3	0
≥50 & ≥5	1	18	42	2	0
NC & ≥10	0	17	40	2	0

337

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	+	+	0	0	0
<10 & OR <2	1	5	3	0	0
<20 & OR <5	4	13	11	+	0
VSBY ≥5	9	53	36	1	0
≥50 & ≥5	5	35	20	+	0
NC & ≥10	5	31	16	0	0

341

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	0	0	0
<20 & OR <5	1	17	4	0	0
VSBY ≥5	21	64	12	0	0
≥50 & ≥5	20	46	5	0	0
NC & ≥10	20	46	5	0	0

76

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	5	1	0	0
<20 & OR <5	4	13	2	0	0
VSBY ≥5	34	60	6	0	0
≥50 & ≥5	26	41	3	0	0
NC & ≥10	25	39	2	0	0

963

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	1	0	0
<20 & OR <5	3	11	3	1	0
VSBY ≥5	14	69	16	1	0
≥50 & ≥5	10	53	7	0	0
NC & ≥10	9	52	7	0	0

144

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	+	0	0
<10 & OR <2	2	6	2	0	0
<20 & OR <5	3	14	5	0	0
VSBY ≥5	15	63	20	0	0
≥50 & ≥5	12	45	13	0	0
NC & ≥10	11	42	13	0	0

584

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	1	0	0
<20 & OR <5	1	17	5	0	0
VSBY ≥5	15	68	15	0	0
≥50 & ≥5	12	41	10	0	0
NC & ≥10	12	37	10	0	0

155

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	5	0	0
<20 & OR <5	1	21	18	0	0
VSBY ≥5	3	46	50	1	0
≥50 & ≥5	1	17	17	1	0
NC & ≥10	1	17	14	1	0

146

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	+	+	+	0	0
<10 & OR <2	1	4	4	+	0
<20 & OR <5	1	8	7	1	0
VSBY ≥5	8	60	29	2	0
≥50 & ≥5	7	50	20	1	0
NC & ≥10	7	48	20	1	0

1383

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	0	4	0	0
<20 & OR <5	1	0	12	0	0
VSBY ≥5	4	46	49	0	0
≥50 & ≥5	3	40	33	0	0
NC & ≥10	3	37	31	0	0

67

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	1	4	0	0
<20 & OR <5	3	4	8	0	0
VSBY ≥5	8	41	47	4	0
≥50 & ≥5	5	34	36	3	0
NC & ≥10	5	34	36	3	0

180

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	+	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	4	1	0
<20 & OR <5	+	6	8	1	+
VSBY ≥5	6	44	43	5	+
≥50 & ≥5	5	37	31	3	0
NC & ≥10	5	35	28	3	0

465

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	1	4	0	0
<20 & OR <5	1	6	10	0	0
VSBY ≥5	8	50	37	3	0
≥50 & ≥5	6	40	26	2	0
NC & ≥10	5	37	24	2	0

209

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	0	0	0
<20 & OR <5	0	10	12	2	2
VSBY ≥5	0	40	43	12	2
≥50 & ≥5	0	24	26	7	0
NC & ≥10	0	19	26	7	0

42

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	1	4	3	0
<20 & OR <5	1	8	7	4	0
VSBY ≥5	12	44	32	11	0
≥50 & ≥5	11	29	19	7	0
NC & ≥10	11	27	15	5	0

73

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	5	5	0	0
<20 & OR <5	4	14	16	2	0
VSBY ≥5	9	46	41	4	0
≥50 & ≥5	5	28	19	2	0
NC & ≥10	5	27	18	2	0

188

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	1	0
<20 & OR <5	+	10	25	3	0
VSBY ≥5	2	31	59	7	+
≥50 & ≥5	1	15	20	2	+
NC & ≥10	1	13	19	2	+

1315

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	0	0	0
<20 & OR <5	0	14	7	0	0
VSBY ≥5	5	55	38	0	0
≥50 & ≥5	5	33	29	0	0
NC & ≥10	5	24	17	0	0

42

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	1	1
<6 & OR <2	0	1	3	3	1
VSBY <2	0	0	0	0	1
<10 & OR <2	0	1	9	3	1
<20 & OR <5	0	15	17	13	1
VSBY ≥5	3	27	35	27	4
≥50 & ≥5	3	12	17	9	4
NC & ≥10	3	12	17	8	4

75

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	2	1	0
VSBY <2	0	0	1	0	0
<10 & OR <2	1	0	8	1	1
<20 & OR <5	1	11	20	3	2
VSBY ≥5	4	38	45	8	2
≥50 & ≥5	2	21	23	6	0
NC & ≥10	1	19	22	4	0

104

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	+	2	0	1
VSBY <2	0	0	1	0	0
<10 & OR <2	1	2	4	2	1
<20 & OR <5	1	5	13	3	2
VSBY ≥5	6	32	43	14	3
≥50 & ≥5	5	24	26	8	1
NC & ≥10	4	21	25	7	1

342

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	6	3	2
<20 & OR <5	1	7	12	6	2
VSBY ≥5	6	33	38	18	4
≥50 & ≥5	4	24	25	9	2
NC & ≥10	4	22	24	8	2

277

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	1	3	4	1	1
VSBY <2	0	1	1	0	1
<10 & OR <2	1	5	11	4	1
<20 & OR <5	2	12	23	8	1
VSBY ≥5	2	26	43	21	0
≥50 & ≥5	1	12	21	7	0
NC & ≥10	1	12	16	5	0

95

37

INSUFFICIENT DATA

38

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	4	0
VSBY <2	0	0	0	4	0
<10 & OR <2	0	0	4	4	0
<20 & OR <5	0	23	19	4	0
VSBY ≥5	0	38	38	15	0
≥50 & ≥5	0	12	23	12	0
NC & ≥10	0	12	23	12	0

26

39

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	6	0	0	0
<6 & OR <2	0	6	0	0	0
VSBY <2	0	6	0	0	0
<10 & OR <2	0	6	0	0	22
<20 & OR <5	0	22	11	0	22
VSBY ≥5	6	17	33	11	22
≥50 & ≥5	6	0	6	6	0
NC & ≥10	6	0	6	6	0

18

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	7	13	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	7	20	0
<20 & OR <5	0	13	7	33	13
VSBY ≥5	0	20	13	47	20
≥50 & ≥5	0	7	7	13	7
NC & ≥10	0	7	0	13	7

15

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	0	0
<6 & OR <2	0	0	8	0	0
VSBY <2	0	0	8	0	0
<10 & OR <2	0	0	13	0	0
<20 & OR <5	0	3	15	5	0
VSBY ≥5	0	31	38	15	0
≥50 & ≥5	0	21	28	10	0
NC & ≥10	0	21	28	5	0

39

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

IBILITY-WIND

APRIL

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	5	1	0	0
<20 & OR <5	4	13	2	0	0
VSBY ≥5	34	60	6	0	0
≥50 & ≥5	26	41	3	0	0
NC & ≥10	25	39	2	0	0

963

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	1	0	0
<20 & OR <5	3	11	3	1	0
VSBY ≥5	14	69	16	1	0
≥50 & ≥5	10	53	7	0	0
NC & ≥10	9	52	7	0	0

144

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	+	0	0
<10 & OR <2	2	6	2	0	0
<20 & OR <5	3	14	5	0	0
VSBY ≥5	15	63	20	0	0
≥50 & ≥5	12	45	13	0	0
NC & ≥10	11	42	13	0	0

584

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	0	0
<20 & OR <5	0	3	6	2	0
VSBY ≥5	0	30	69	2	0
≥50 & ≥5	0	26	57	0	0
NC & ≥10	0	25	55	0	0

108

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	2	3	0	0
<20 & OR <5	+	7	7	0	0
VSBY ≥5	2	49	48	+	0
≥50 & ≥5	2	39	37	+	0
NC & ≥10	2	38	36	+	0

1142

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	4	+	0
<20 & OR <5	+	8	15	1	0
VSBY ≥5	1	38	60	2	0
≥50 & ≥5	1	25	35	1	0
NC & ≥10	1	24	33	1	0

1058

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	0	4	0	0
<20 & OR <5	1	0	12	0	0
VSBY ≥5	4	46	49	0	0
≥50 & ≥5	3	40	33	0	0
NC & ≥10	3	37	31	0	0

67

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	1	4	0	0
<20 & OR <5	3	4	8	0	0
VSBY ≥5	8	41	47	4	0
≥50 & ≥5	5	34	36	3	0
NC & ≥10	5	34	36	3	0

180

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	+	0
<20 & OR <5	+	14	21	+	+
VSBY ≥5	2	41	55	2	+
≥50 & ≥5	1	18	21	1	0
NC & ≥10	1	17	20	1	0

1228

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	1	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	4	0	0
<20 & OR <5	0	25	9	0	0
VSBY ≥5	2	73	22	0	0
≥50 & ≥5	2	34	10	0	0
NC & ≥10	2	31	10	0	0

163

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	1	3	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	9	5	1	0
<20 & OR <5	3	20	11	1	0
VSBY ≥5	8	51	38	3	0
≥50 & ≥5	5	16	11	1	0
NC & ≥10	5	15	11	1	0

150

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	1	4	3	0
<20 & OR <5	1	8	7	4	0
VSBY ≥5	12	44	32	11	0
≥50 & ≥5	11	29	19	7	0
NC & ≥10	11	27	15	5	0

73

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	5	5	0	0
<20 & OR <5	4	14	16	2	0
VSBY ≥5	9	46	41	4	0
≥50 & ≥5	5	28	19	2	0
NC & ≥10	5	27	18	2	0

188

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	1	0
<20 & OR <5	+	10	25	3	0
VSBY ≥5	2	31	59	7	+
≥50 & ≥5	1	15	20	2	+
NC & ≥10	1	13	19	2	+

1315

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	1	+	0
VSBY <2	+	+	+	0	0
<10 & OR <2	1	3	3	1	+
<20 & OR <5	2	8	11	4	+
VSBY ≥5	6	32	40	19	1
≥50 & ≥5	4	20	24	13	1
NC & ≥10	3	19	22	11	1

1921

26

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	5	5	0	0
VSBY <2	0	5	0	0	0
<10 & OR <2	0	11	16	0	0
<20 & OR <5	0	11	21	0	0
VSBY ≥5	5	37	47	5	0
≥50 & ≥5	5	32	26	0	0
NC & ≥10	5	11	16	0	0

19

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	1	0
VSBY <2	0	0	+	1	0
<10 & OR <2	0	1	4	3	0
<20 & OR <5	+	5	10	6	1
VSBY ≥5	4	30	46	13	2
≥50 & ≥5	4	21	32	6	+
NC & ≥10	4	20	27	6	0

248

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	+	2	0	1
VSBY <2	0	0	1	0	0
<10 & OR <2	1	2	4	2	1
<20 & OR <5	1	5	13	3	2
VSBY ≥5	6	32	43	14	3
≥50 & ≥5	5	24	26	8	1
NC & ≥10	4	21	25	7	1

342

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	6	3	2
<20 & OR <5	1	7	12	6	2
VSBY ≥5	6	33	38	18	4
≥50 & ≥5	4	24	25	9	2
NC & ≥10	4	22	24	8	2

277

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	1	3	4	1	1
VSBY <2	0	1	1	0	1
<10 & OR <2	1	5	11	4	1
<20 & OR <5	2	12	23	8	1
VSBY ≥5	2	26	43	21	0
≥50 & ≥5	1	12	21	7	0
NC & ≥10	1	12	16	5	0

95

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	1	1	0	0
<10 & OR <2	0	1	3	1	0
<20 & OR <5	1	5	9	4	0
VSBY ≥5	4	20	51	20	1
≥50 & ≥5	3	11	37	16	1
NC & ≥10	3	11	29	15	1

79

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	4	1	0	+
<6 & OR <2	1	4	1	0	+
VSBY <2	1	3	1	0	+
<10 & OR <2	1	4	2	0	1
<20 & OR <5	1	9	7	+	1
VSBY ≥5	6	41	37	4	1
≥50 & ≥5	4	32	29	4	1
NC & ≥10	3	21	18	2	1

374

36

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	0	13	20	0
VSBY ≥5	7	27	27	27	0
≥50 & ≥5	7	27	7	7	0
NC & ≥10	7	13	7	7	0

15

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	6	0	0	0
<6 & OR <2	0	6	0	0	0
VSBY <2	0	6	0	0	0
<10 & OR <2	0	6	0	0	22
<20 & OR <5	0	22	11	0	22
VSBY ≥5	6	17	33	11	22
≥50 & ≥5	6	0	6	6	0
NC & ≥10	6	0	6	6	0

18

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	7	13	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	7	20	0
<20 & OR <5	0	13	7	33	13
VSBY ≥5	0	20	13	47	20
≥50 & ≥5	0	7	7	13	7
NC & ≥10	0	7	0	13	7

15

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	0	0
<6 & OR <2	0	0	8	0	0
VSBY <2	0	0	8	0	0
<10 & OR <2	0	0	13	0	0
<20 & OR <5	0	3	15	5	0
VSBY ≥5	0	31	38	15	0
≥50 & ≥5	0	21	28	10	0
NC & ≥10	0	21	28	5	0

39

43

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	4	1	1
<6 & OR <2	1	4	7	1	3
VSBY <2	1	3	3	1	3
<10 & OR <2	1	7	10	4	3
<20 & OR <5	3	10	20	7	3
VSBY ≥5	1	23	34	17	6
≥50 & ≥5	0	7	14	7	1
NC & ≥10	0	3	14	7	1

70

44

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	4	0	0
<6 & OR <2	0	0	4	7	0
VSBY <2	0	0	4	7	0
<10 & OR <2	0	2	11	9	0
<20 & OR <5	0	2	13	18	2
VSBY ≥5	0	0	11	53	7
≥50 & ≥5	0	0	2	31	2
NC & ≥10	0	0	2	29	0

45

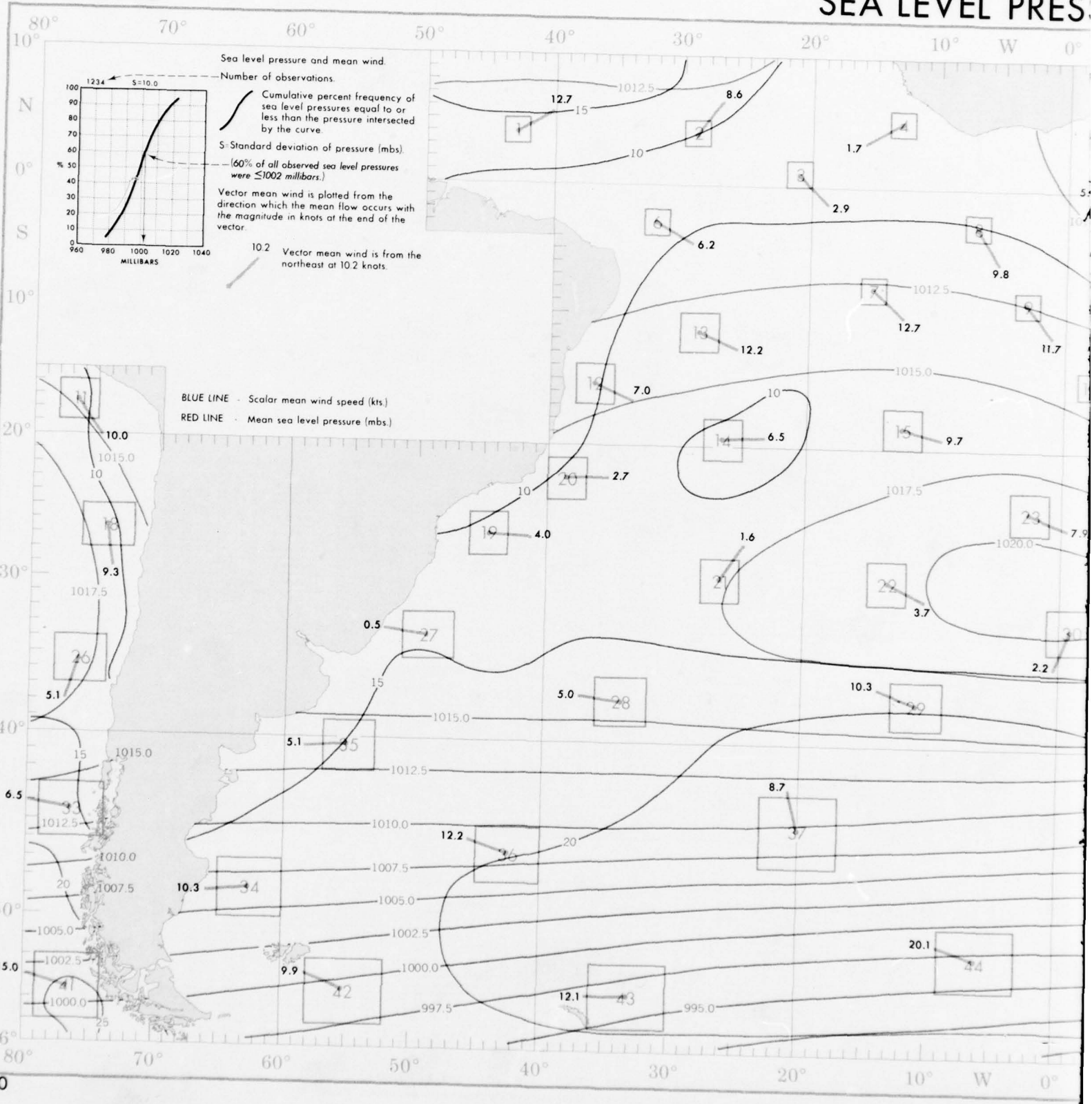
45

INSUFFICIENT DATA

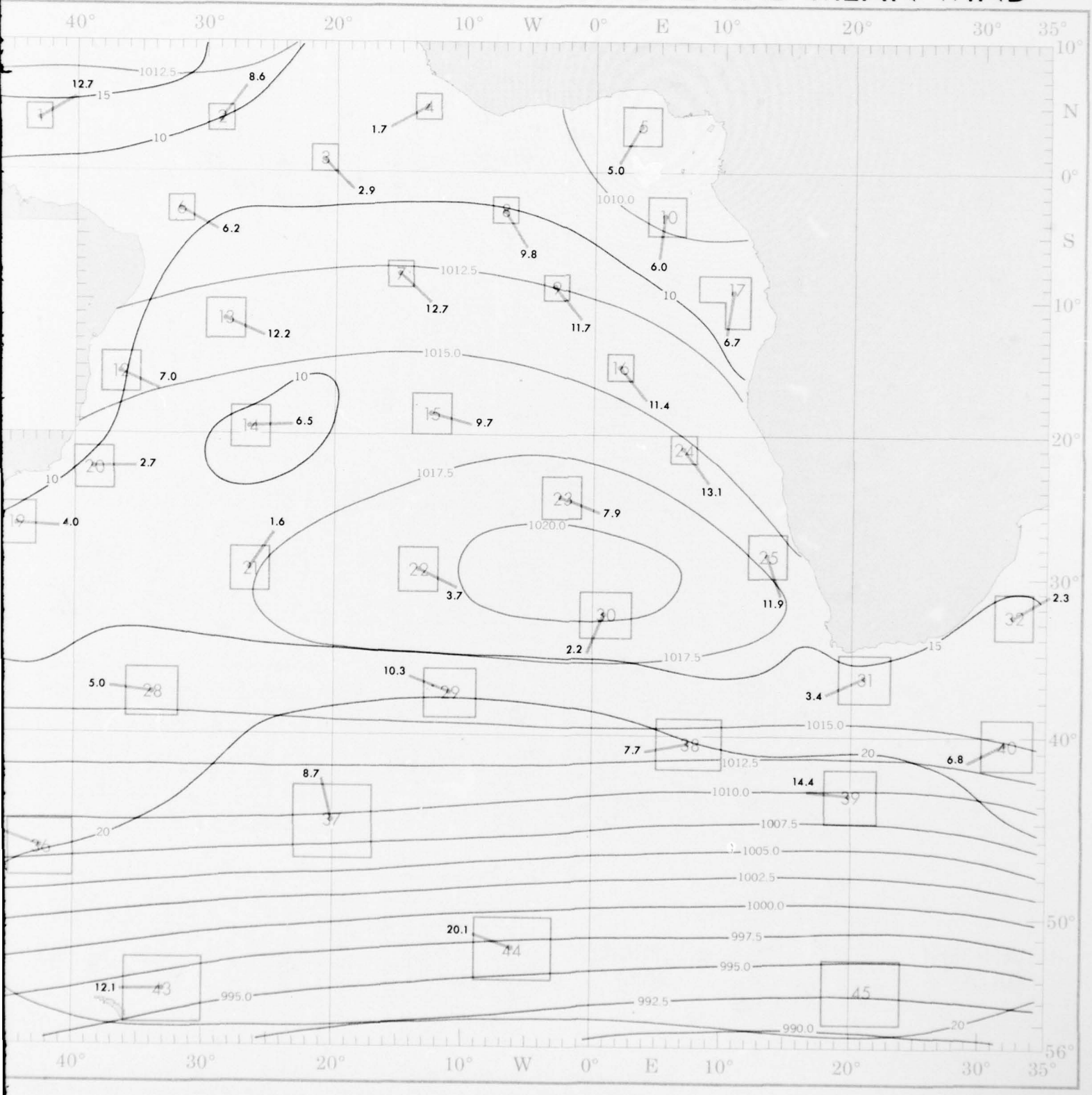
the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL

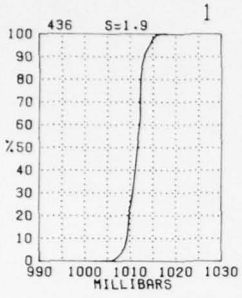
SEA LEVEL PRES

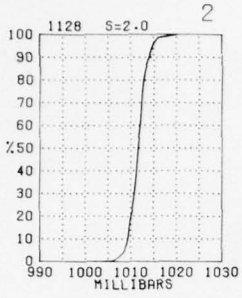


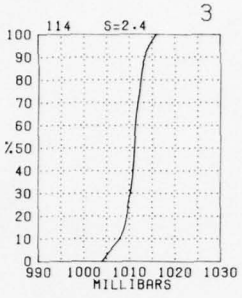
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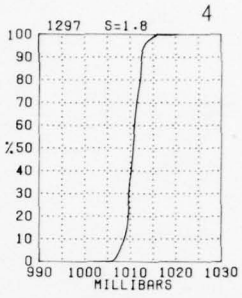


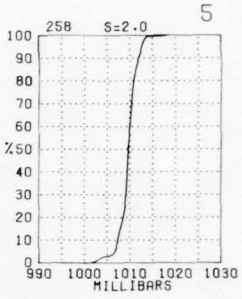
SEA LEVEL PRESSURE

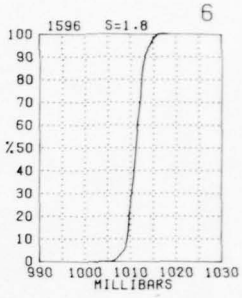


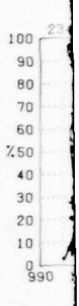


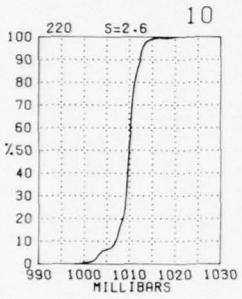


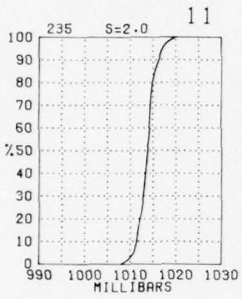


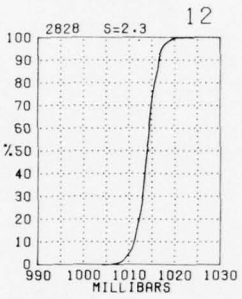


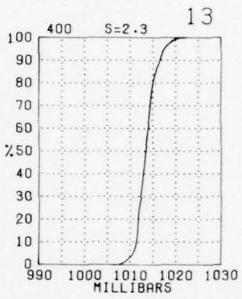


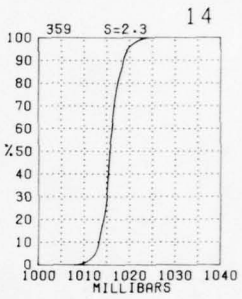


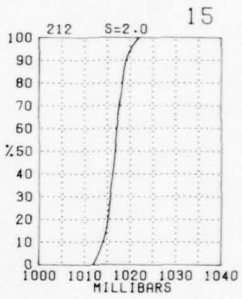


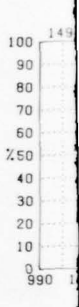


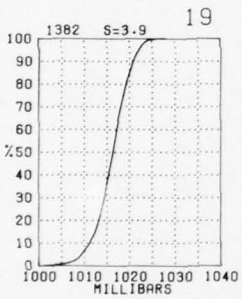


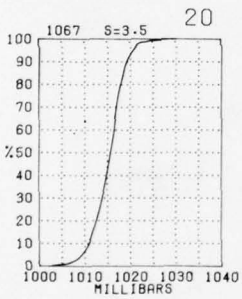


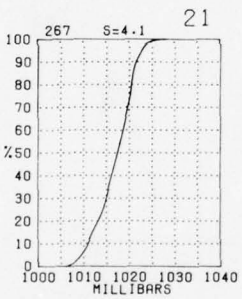


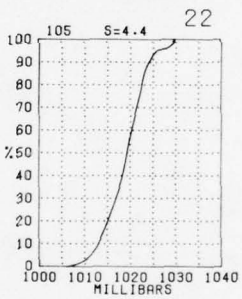


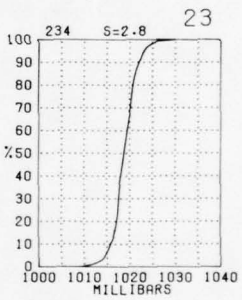


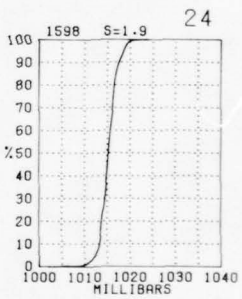


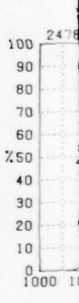


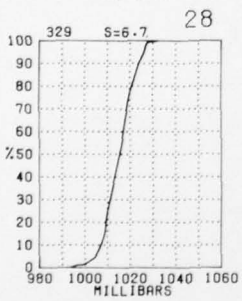


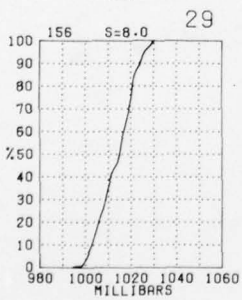


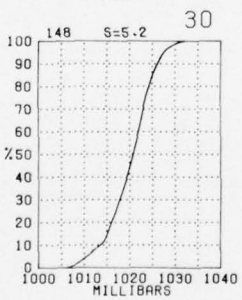


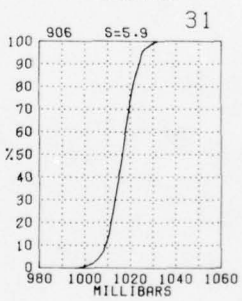


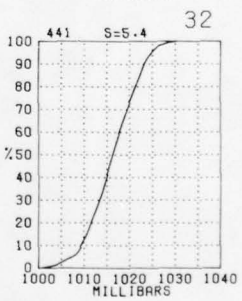


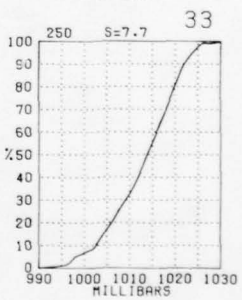


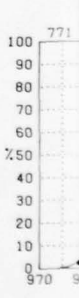


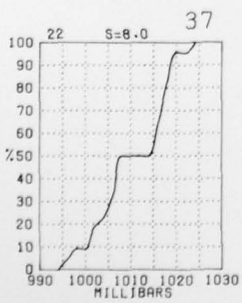


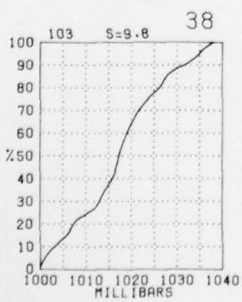


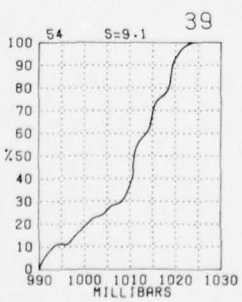


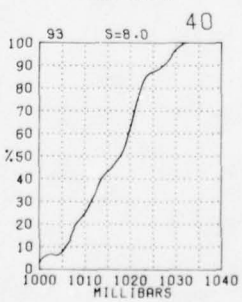


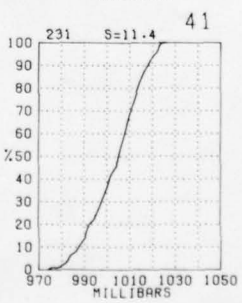


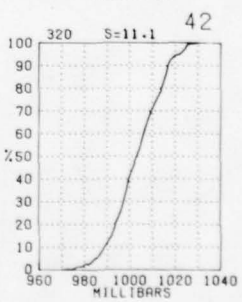


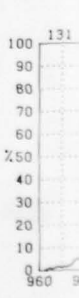






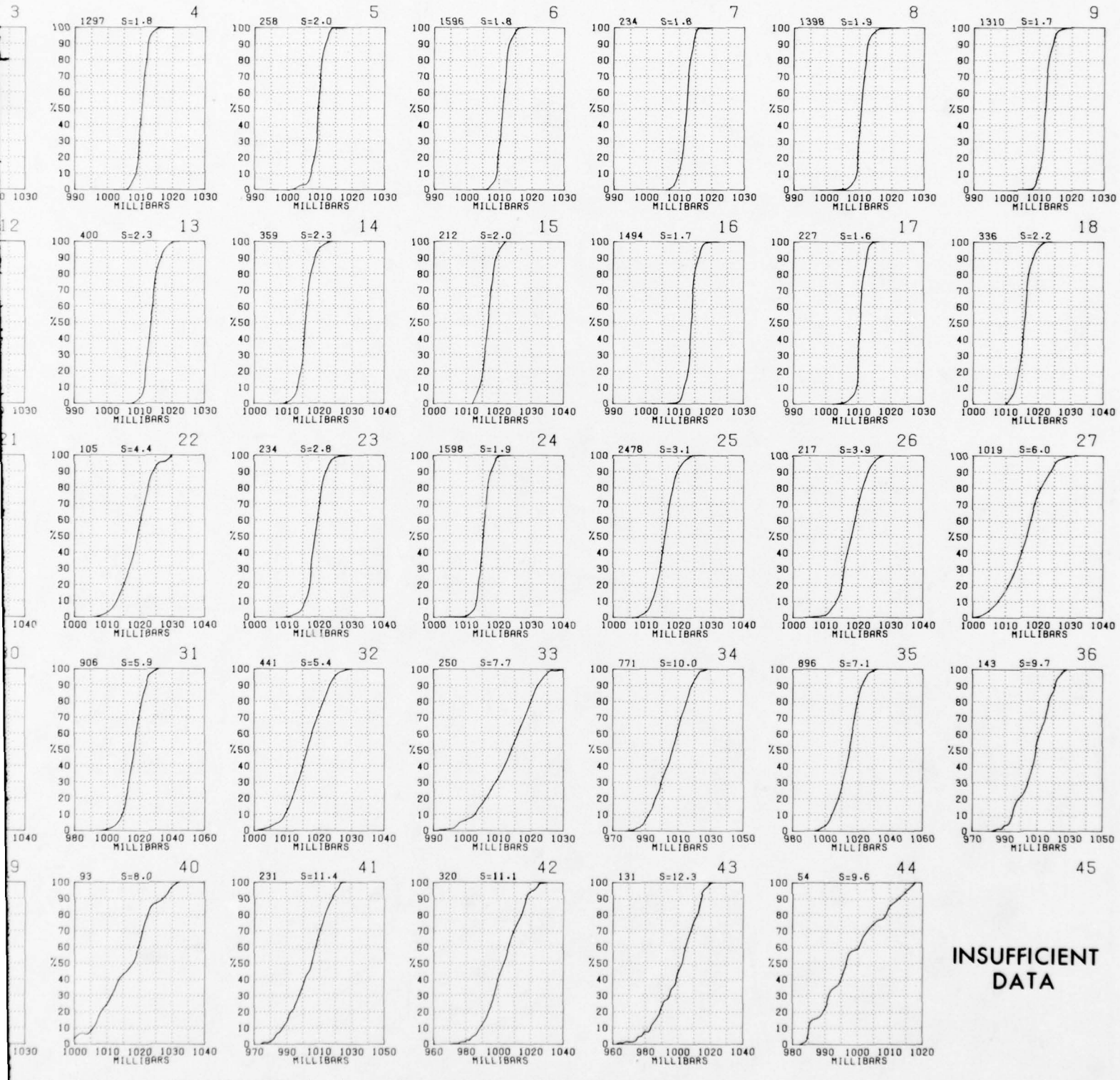






Graphs represent the objective compilation of available data for specified areas without regard to suspect
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

APRIL

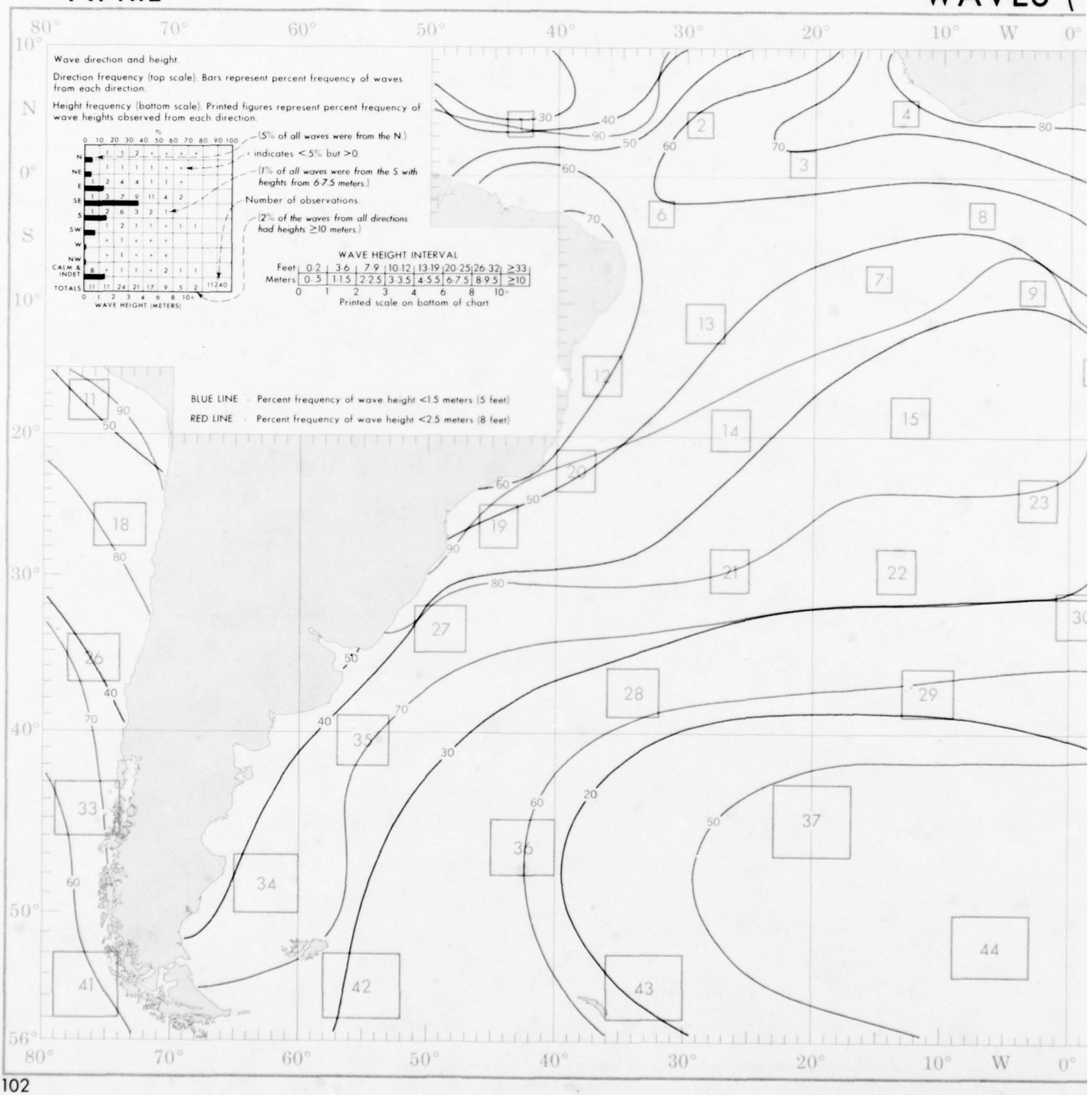


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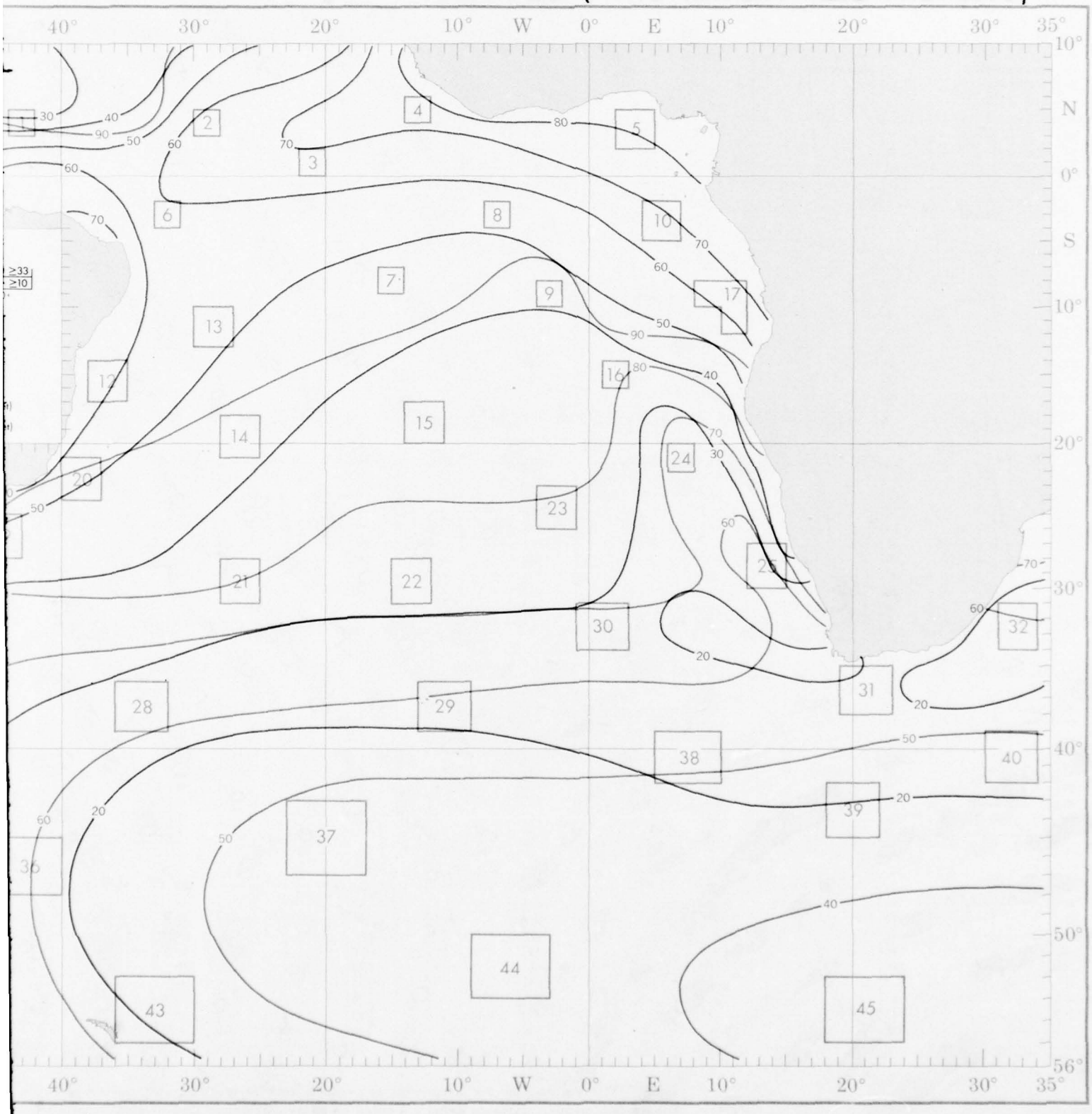
sent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL

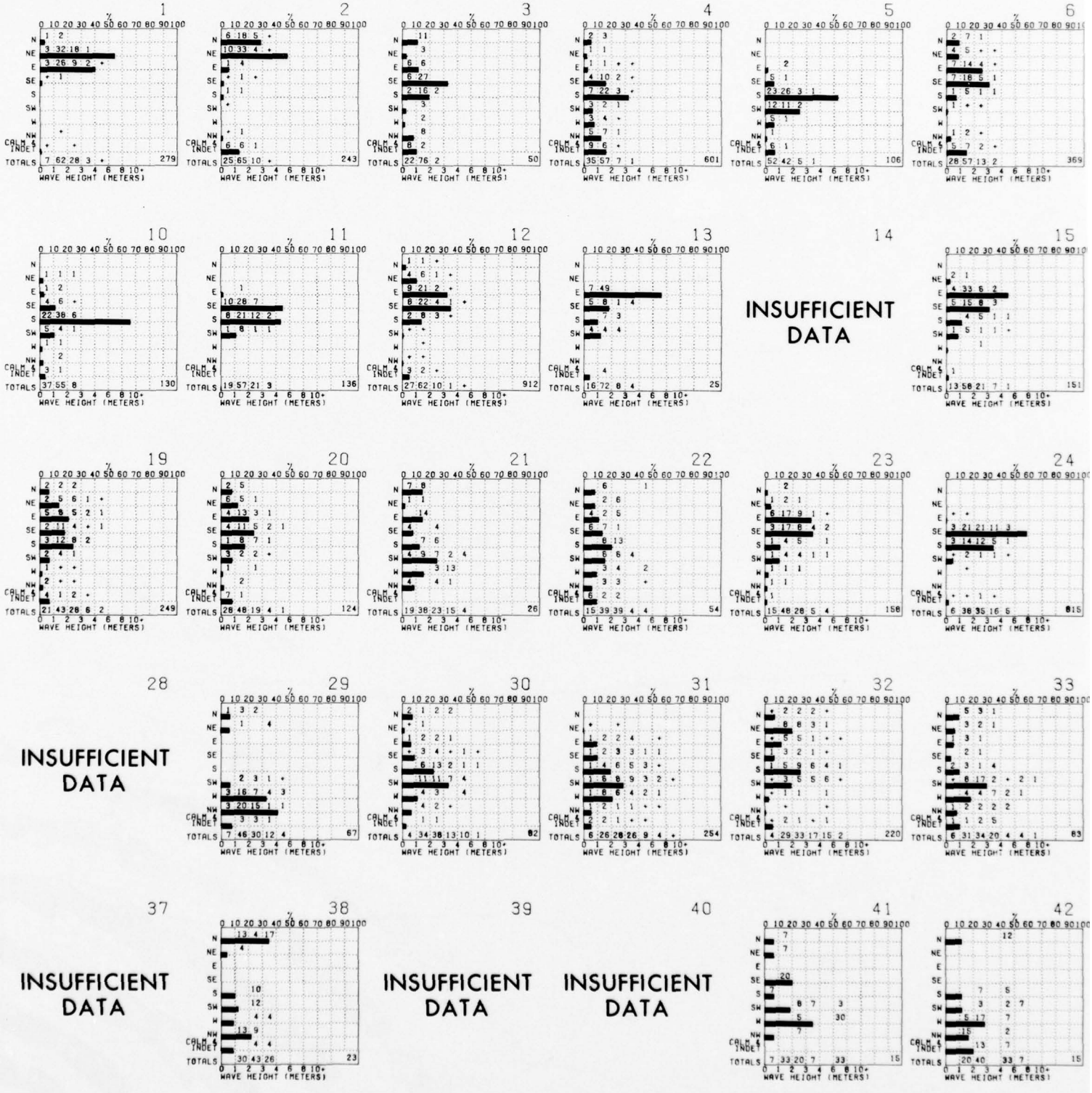
WAVES (


Wave direction and height.
Direction frequency (top scale). Bars represent percent frequency of waves from each direction.
Height frequency (bottom scale). Printed figures represent percent frequency of wave heights observed from each direction.
(5% of all waves were from the N.)
+ indicates < 5% but >0.
(1% of all waves were from the S with heights from 6-7.5 meters.)
Number of observations.
(2% of the waves from all directions had heights ≥10 meters.)
WAVE HEIGHT (METERS)
WAVE HEIGHT INTERVAL
Feet 0-2 3-6 7-9 10-12 13-19 20-25 26-32 ≥33
Meters 0-.5 1-1.5 2-2.5 3-3.5 4-5.5 6-7.5 8-9.5 ≥10
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

WAVES (<1.5 AND <2.5 METERS)



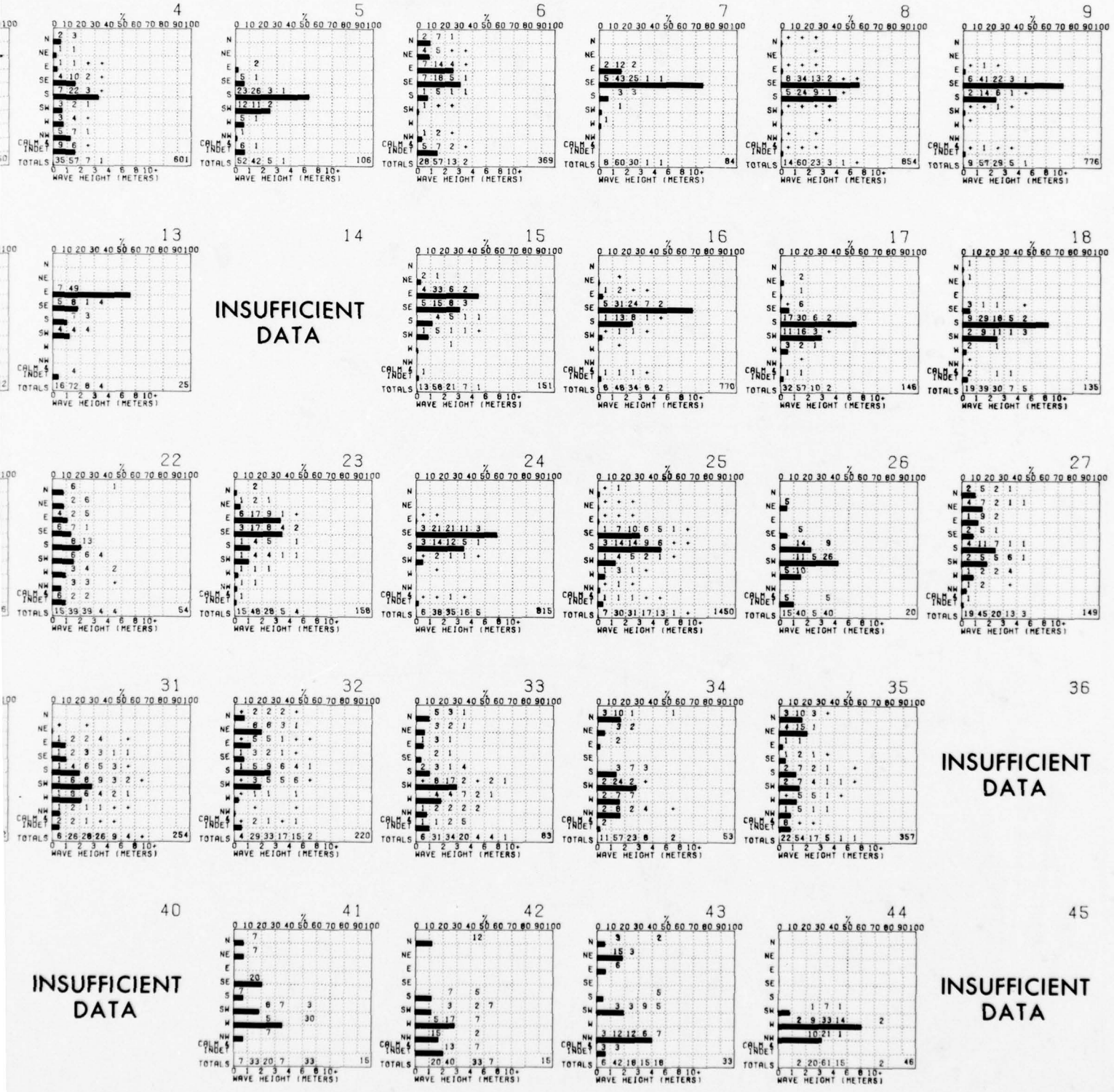
WAVE DIRECTION AND HEIGHT



Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted wher

HEIGHT

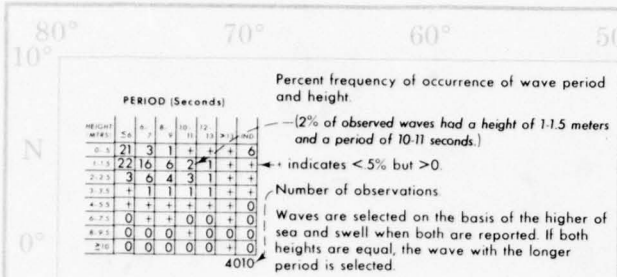
APRIL



the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

APRIL

WAVES (



Percent frequency of occurrence of wave period and height.

(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)

+ indicates < 5% but >0.

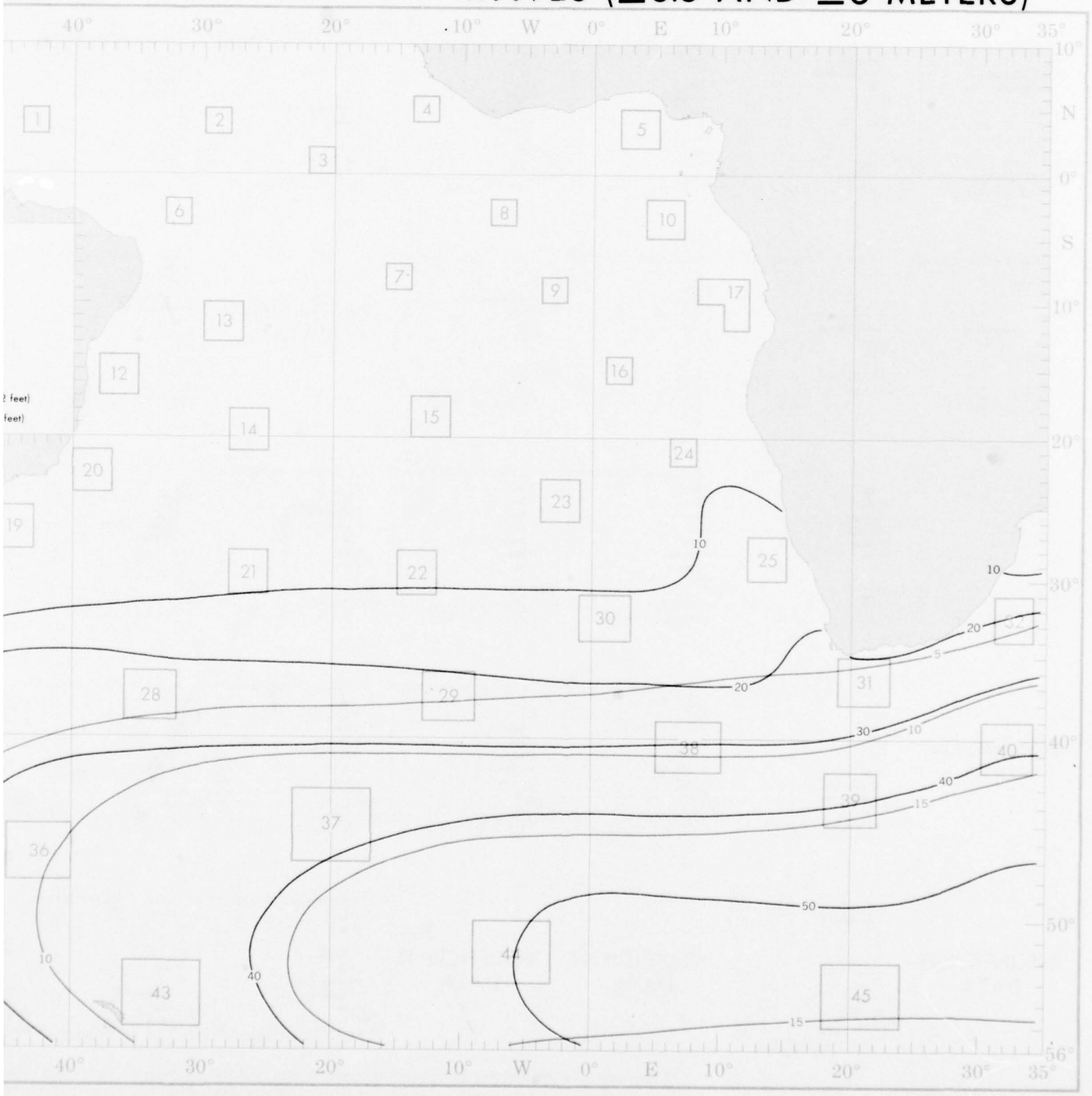
Number of observations.

Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.

BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)

RED LINE - Percent frequency of wave height ≥6 meters (20 feet)

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	0	0	0	0	+
1-1.5	23	30	6	1	+	+	1
2-2.5	4	13	7	2	+	+	1
3-3.5	0	1	+	1	+	1	0
4-5.5	0	0	0	0	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

279

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	1	+	0	0	9
1-1.5	18	22	9	2	1	0	12
2-2.5	+	5	2	1	+	0	1
3-3.5	0	0	0	0	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

246

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	2	2	0	0	0	7
1-1.5	29	24	11	2	2	0	2
2-2.5	0	2	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

55

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	3	1	1	0	0	12
1-1.5	17	17	7	2	3	1	8
2-2.5	1	1	2	1	+	1	+
3-3.5	0	+	+	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

631

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	8	5	3	0	0	23
1-1.5	13	9	4	2	3	0	9
2-2.5	0	1	3	0	1	0	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

114

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	4	1	1	0	0	9
1-1.5	14	22	5	2	1	0	10
2-2.5	2	4	1	1	0	+	4
3-3.5	0	1	0	1	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

382

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	26	2	1	1	0	0	10
1-1.5	17	11	8	1	6	0	8
2-2.5	1	3	2	1	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

139

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	0	1	0	0	0	6
1-1.5	22	17	8	4	1	1	4
2-2.5	2	4	5	6	1	1	1
3-3.5	0	0	1	1	0	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

138

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	2	1	1	0	0	7
1-1.5	27	19	6	1	1	+	6
2-2.5	1	4	3	1	+	+	1
3-3.5	+	+	+	+	+	0	+
4-5.5	0	0	0	0	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

930

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	12
1-1.5	48	12	4	0	0	4	4
2-2.5	4	4	0	0	0	0	0
3-3.5	0	0	4	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

25

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	1	1	0	0	2
1-1.5	23	22	5	4	1	1	2
2-2.5	8	7	5	0	1	1	1
3-3.5	2	1	1	1	1	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

153

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	2	0	1	0	0	4
1-1.5	18	14	4	0	0	+	5
2-2.5	2	10	6	2	1	0	6
3-3.5	0	2	1	1	1	+	1
4-5.5	1	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

256

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	3	0	0	0	0	11
1-1.5	17	13	9	1	1	0	5
2-2.5	2	6	5	5	0	0	1
3-3.5	0	1	0	2	0	0	1
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

129

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	15	0	0	0	0	0
1-1.5	8	23	8	0	0	0	0
2-2.5	4	8	12	0	0	0	0
3-3.5	0	12	4	0	0	0	0
4-5.5	0	0	0	4	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

26

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	6
1-1.5	11	19	9	0	0	0	0
2-2.5	11	4	9	11	2	0	2
3-3.5	0	0	4	0	0	0	0
4-5.5	0	0	2	0	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

54

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	1	1	0	0	3
1-1.5	18	19	5	2	1	1	1
2-2.5	5	9	5	5	1	1	0
3-3.5	2	1	2	0	0	1	0
4-5.5	2	0	2	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

164

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	+	0	0	0	1
1-1.5	15	12	4	2	1	1	4
2-2.5	6	13	7	4	1	2	2
3-3.5	1	5	6	1	1	1	1
4-5.5	+	1	2	+	+	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

819

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	3
1-1.5	4	16	15	1	1	0	7
2-2.5	3	16	7	1	0	0	1
3-3.5	0	6	4	0	0	0	1
4-5.5	0	1	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

68

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	1	0	0	0	0	0
1-1.5	9	13	10	0	1	0	1
2-2.5	2	12	13	2	1	5	1
3-3.5	0	5	2	2	4	0	0
4-5.5	0	4	5	1	0	0	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

82

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	0	+	0	0	3
1-1.5	12	5	3	1	+	1	3
2-2.5	4	8	6	4	1	2	3
3-3.5	1	8	11	4	1	+	1
4-5.5	0	1	3	1	3	1	+
6-7.5	0	1	+	1	1	1	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

256

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	+	0	0	+
1-1.5	8	9	4	1	0	0	6
2-2.5	5	11	9	1	2	+	5
3-3.5	2	5	5	3	1	0	2
4-5.5	0	3	4	2	2	+	3
6-7.5	0	0	1	1	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

222

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	1	0	0	4
1-1.5	18	8	0	4	0	0	1
2-2.5	10	7	5	4	2	2	4
3-3.5	4	4	4	1	4	1	4
4-5.5	0	1	1	0	0	0	1
6-7.5	0	1	2	0	0	0	0
8-9.5	0	1	0	0	0	0	0
≥10	0	0	0	0	0	0	0

84

37

INSUFFICIENT DATA

38

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	26	4	0	0	0	0	0
2-2.5	9	13	4	9	4	0	4
3-3.5	17	0	0	4	0	0	4
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

23

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	7	0	0	0
1-1.5	7	27	0	0	0	0	0
2-2.5	0	7	0	13	0	0	0
3-3.5	0	0	0	7	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	33	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	20	0	0	0	0	0	0
2-2.5	0	0	20	0	7	0	13
3-3.5	0	0	0	0	0	0	0
4-5.5	7	0	7	7	7	0	7
6-7.5	0	0	7	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

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4

PERIOD (SECONDS)

[IGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
)-.5	20	3	1	1	0	0	12
-1.5	17	17	7	2	3	1	8
-2.5	1	1	2	1	+	1	+
-3.5	0	+	+	0	+	0	0
-5.5	0	0	0	0	0	0	0
-7.5	0	0	0	0	0	0	0
-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

631

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	8	5	3	0	0	23
1-1.5	13	9	4	2	3	0	9
2-2.5	0	1	3	0	1	0	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

114

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	4	1	1	0	0	9
1-1.5	14	22	5	2	1	0	10
2-2.5	2	4	1	1	0	+	4
3-3.5	0	1	0	1	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

382

7

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	1
1-1.5	23	26	5	1	1	1	2
2-2.5	7	7	11	4	0	0	1
3-3.5	0	0	1	0	0	0	0
4-5.5	1	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

84

8

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	0	+	0	0	2
1-1.5	23	19	7	1	3	1	6
2-2.5	5	8	5	2	1	1	1
3-3.5	1	1	1	+	0	+	+
4-5.5	+	+	+	0	0	0	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

857

9

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	+	+	0	0	2
1-1.5	22	19	5	2	2	+	7
2-2.5	6	11	7	2	1	1	1
3-3.5	1	1	1	1	+	+	+
4-5.5	0	1	+	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

780

13

PERIOD (SECONDS)

[IGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
)-.5	4	0	0	0	0	0	12
-1.5	48	12	4	0	0	4	4
-2.5	4	4	0	0	0	0	0
-3.5	0	0	4	0	0	0	0
-5.5	0	0	0	0	0	0	0
-7.5	0	0	0	0	0	0	0
-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

25

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	1	1	0	0	2
1-1.5	23	22	5	4	1	1	2
2-2.5	8	7	5	0	1	1	1
3-3.5	2	1	1	1	1	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

153

16

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	+	0	0	0	0	2
1-1.5	17	17	6	1	2	1	4
2-2.5	6	12	9	3	1	1	2
3-3.5	1	2	3	1	1	+	1
4-5.5	+	1	1	+	0	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

774

17

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	22	4	0	1	0	0	5
1-1.5	25	14	9	3	3	0	3
2-2.5	1	6	1	1	0	0	0
3-3.5	1	0	1	1	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

148

18

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	0	0	0	7
1-1.5	12	8	11	4	1	0	2
2-2.5	2	4	12	8	0	1	4
3-3.5	0	0	0	4	1	0	2
4-5.5	0	1	4	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

138

22

PERIOD (SECONDS)

[IGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
)-.5	9	0	0	0	0	0	6
-1.5	11	19	9	0	0	0	0
-2.5	11	4	9	11	2	0	2
-3.5	0	0	4	0	0	0	0
-5.5	0	0	0	2	0	2	0
-7.5	0	0	0	0	0	0	0
-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

54

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	1	1	0	0	3
1-1.5	18	19	5	2	1	1	1
2-2.5	5	9	5	5	1	1	0
3-3.5	2	1	2	0	0	1	0
4-5.5	2	0	2	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

164

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	+	0	0	0	1
1-1.5	15	12	4	2	1	1	4
2-2.5	6	13	7	4	1	2	2
3-3.5	1	5	6	1	1	1	1
4-5.5	+	1	2	+	+	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

819

25

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	+	0	0	2
1-1.5	10	8	4	2	1	1	4
2-2.5	5	11	7	3	1	1	3
3-3.5	2	5	6	2	1	1	1
4-5.5	1	3	3	3	1	1	1
6-7.5	0	+	+	+	+	+	0
8-9.5	0	+	+	0	0	0	0
≥10	0	0	0	0	0	0	0

1468

26

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	10
1-1.5	20	10	5	5	0	0	0
2-2.5	0	0	0	5	0	0	0
3-3.5	0	5	5	25	0	0	5
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

20

27

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	0	0	0	0	7
1-1.5	15	17	5	0	2	0	6
2-2.5	5	5	3	1	1	1	4
3-3.5	4	2	1	4	1	0	1
4-5.5	0	1	0	1	1	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

31

PERIOD (SECONDS)

IGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
-.5	3	+	0	+	0	0	3
1.5	12	5	3	1	+	1	3
2.5	4	8	6	4	1	2	3
3.5	1	8	11	4	1	+	1
5.5	0	1	3	1	3	1	+
7.5	0	1	+	1	1	1	0
9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

256

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	+	0	0	+
1-1.5	8	9	4	1	0	0	6
2-2.5	5	11	9	1	2	+	5
3-3.5	2	5	5	3	1	0	2
4-5.5	0	3	[illegible]	2	2	+	3
6-7.5	0	0	1	1	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

222

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	1	0	0	4
1-1.5	18	8	0	4	0	0	1
2-2.5	10	7	5	4	2	2	4
3-3.5	4	4	4	1	4	1	4
4-5.5	0	1	1	0	0	0	1
6-7.5	0	1	2	0	0	0	0
8-9.5	0	1	0	0	0	0	0
≥10	0	0	0	0	0	0	0

84

34

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	7
1-1.5	29	13	2	2	5	0	4
2-2.5	4	5	2	7	2	2	0
3-3.5	2	0	4	0	2	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	2	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

55

35

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	0	+	0	0	19
1-1.5	20	9	4	1	1	0	20
2-2.5	2	2	3	1	1	1	5
3-3.5	1	+	1	1	0	1	1
4-5.5	+	1	0	0	0	0	+
6-7.5	0	0	+	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

363

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	7	0	0	0
1-1.5	7	27	0	0	0	0	0
2-2.5	0	7	0	13	0	0	0
3-3.5	0	0	0	7	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	33	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	20	0	0	0	0	0	0
2-2.5	0	0	20	0	7	0	13
3-3.5	0	0	0	0	0	0	0
4-5.5	7	0	7	7	7	0	7
6-7.5	0	0	7	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

43

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	3
1-1.5	21	3	0	0	0	0	18
2-2.5	12	3	0	3	0	0	0
3-3.5	0	0	0	3	0	0	12
4-5.5	0	0	0	0	0	0	18
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

33

44

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	2	0	0	0	0	0	0
2-2.5	0	0	11	9	0	0	0
3-3.5	0	0	11	43	7	0	0
4-5.5	0	0	0	4	11	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	2	0	0

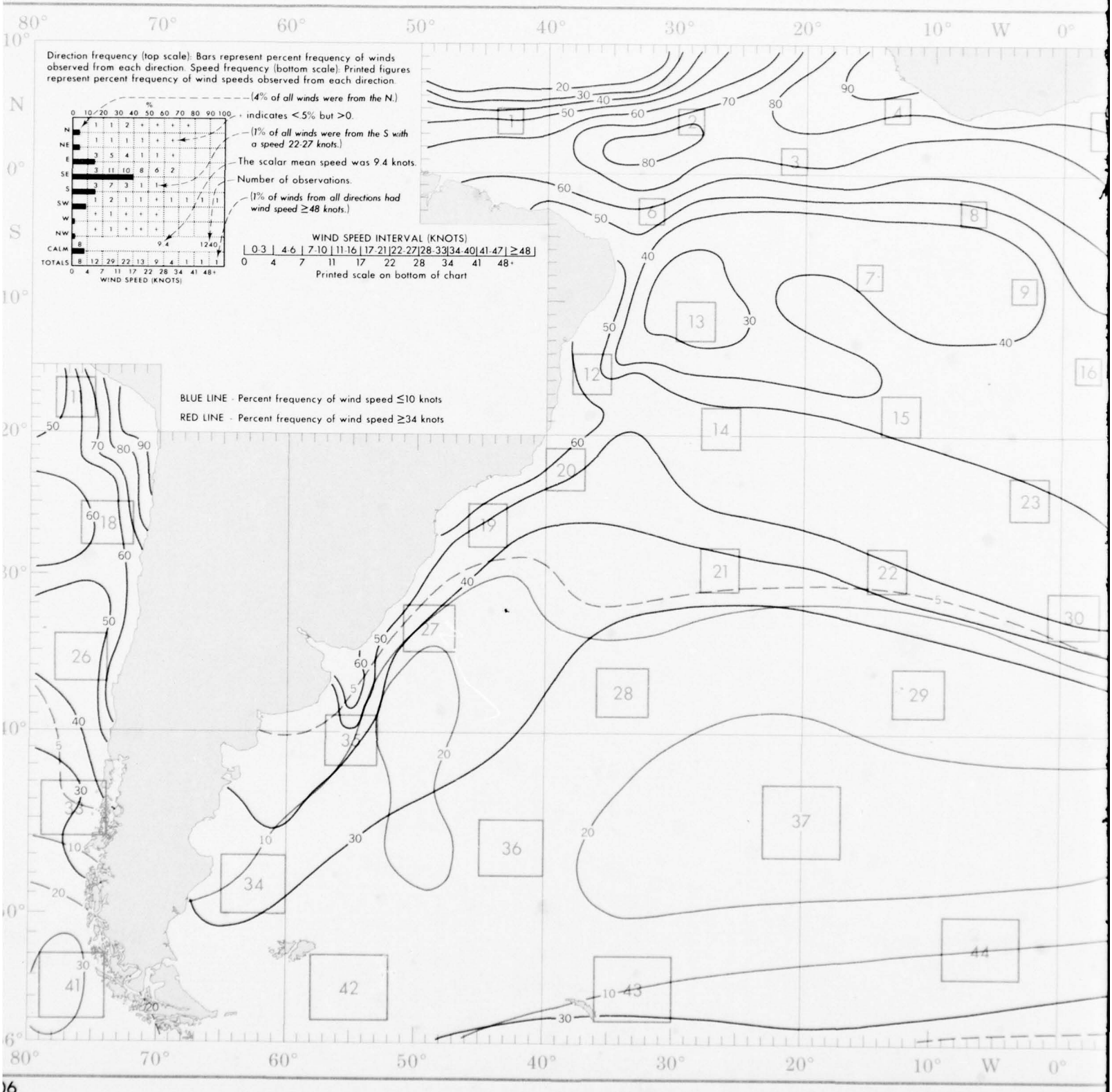
46

45

INSUFFICIENT DATA

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

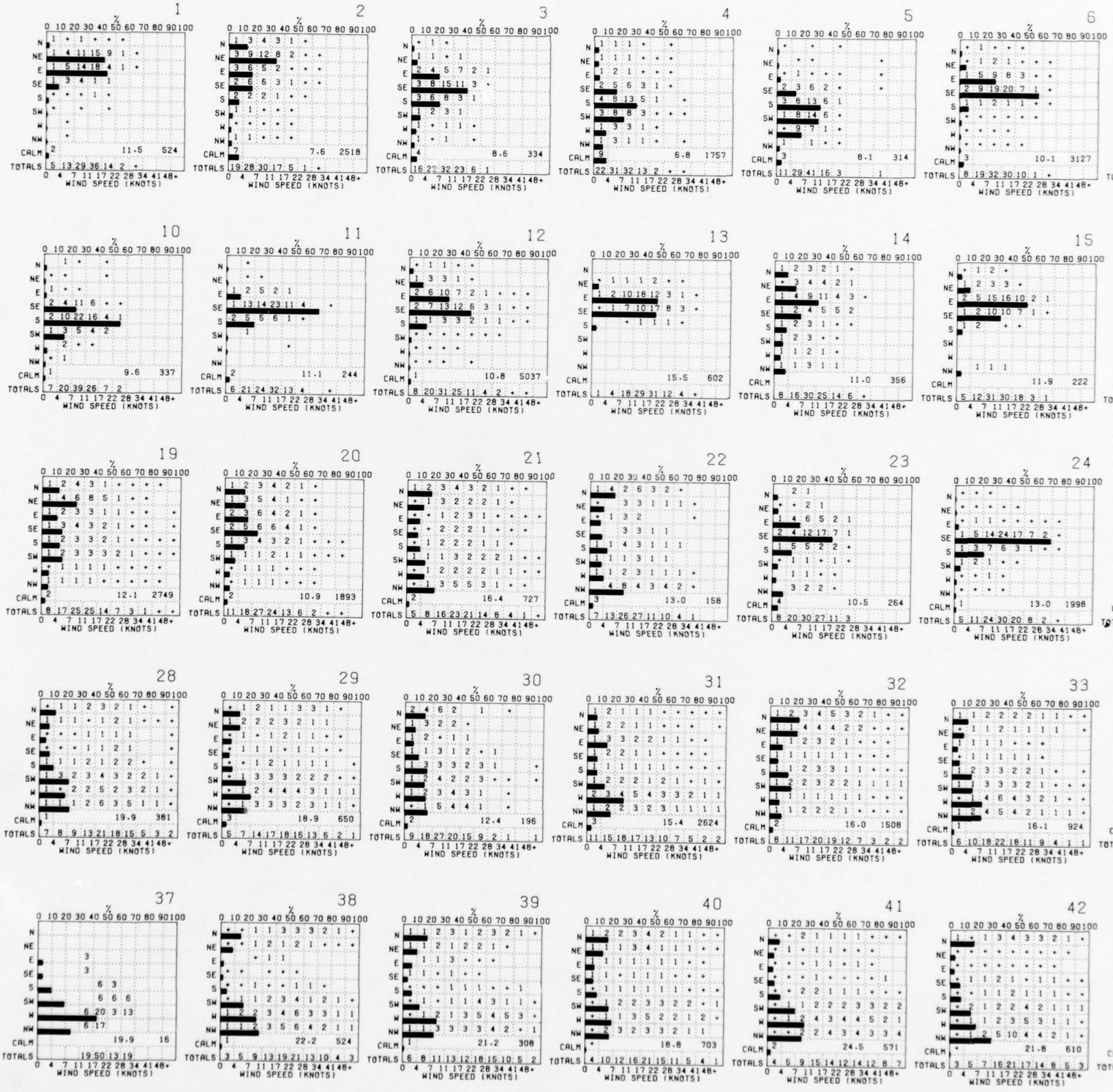
MAY


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 60°

SURFACE WINDS



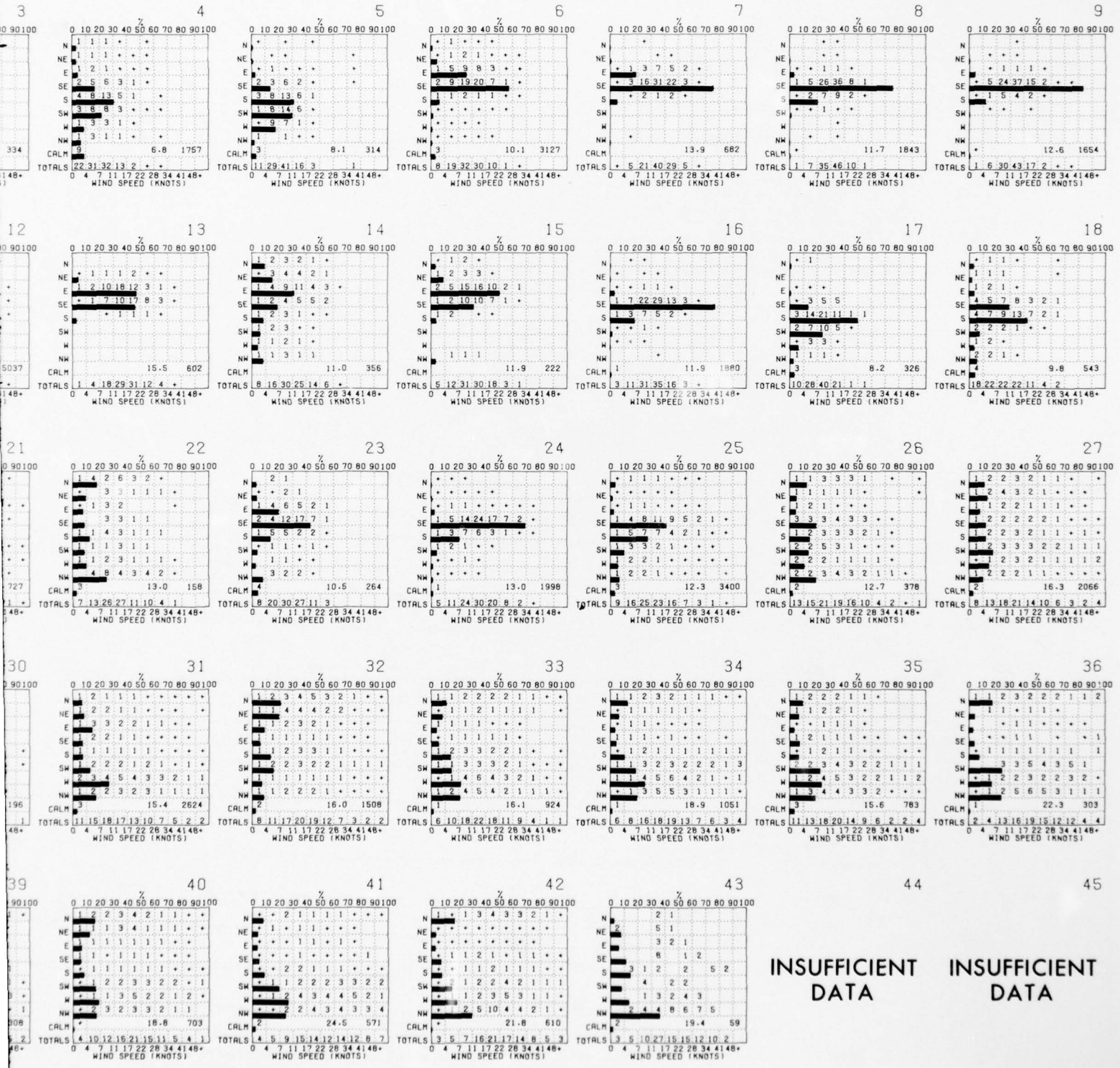
WIND DIRECTION AND SPEED



Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

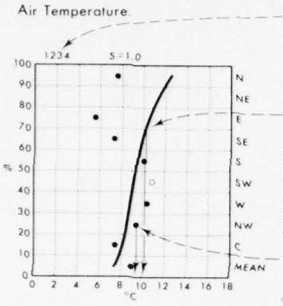
SPEED

MAY



ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY



Cumulative percent frequency of *temperatures* equal to or less than the temperature intersected by the curve.

(*70% of all temperatures were ≤10.3 °C or ≤50.5 °F.*)

S: *Standard deviation of temperatures* (°C).

Mean temperature for each wind direction, calm and for all data combined are represented by dots.

(*With NW winds, the mean temperature was 9.4 °C or 48.9 °F.*)

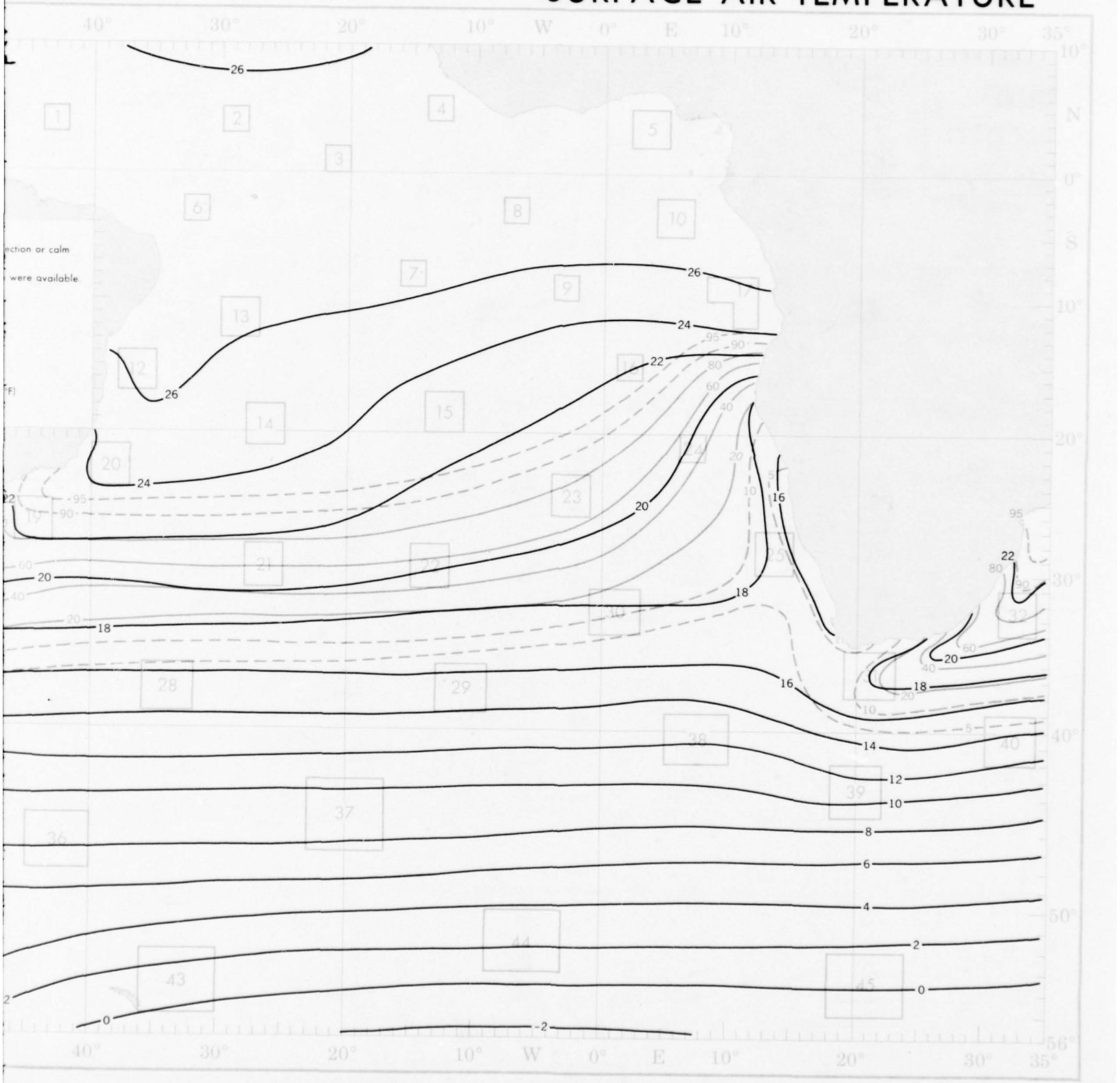
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.

The mean temperature is omitted when less than 10 observations for a direction or calm were available.

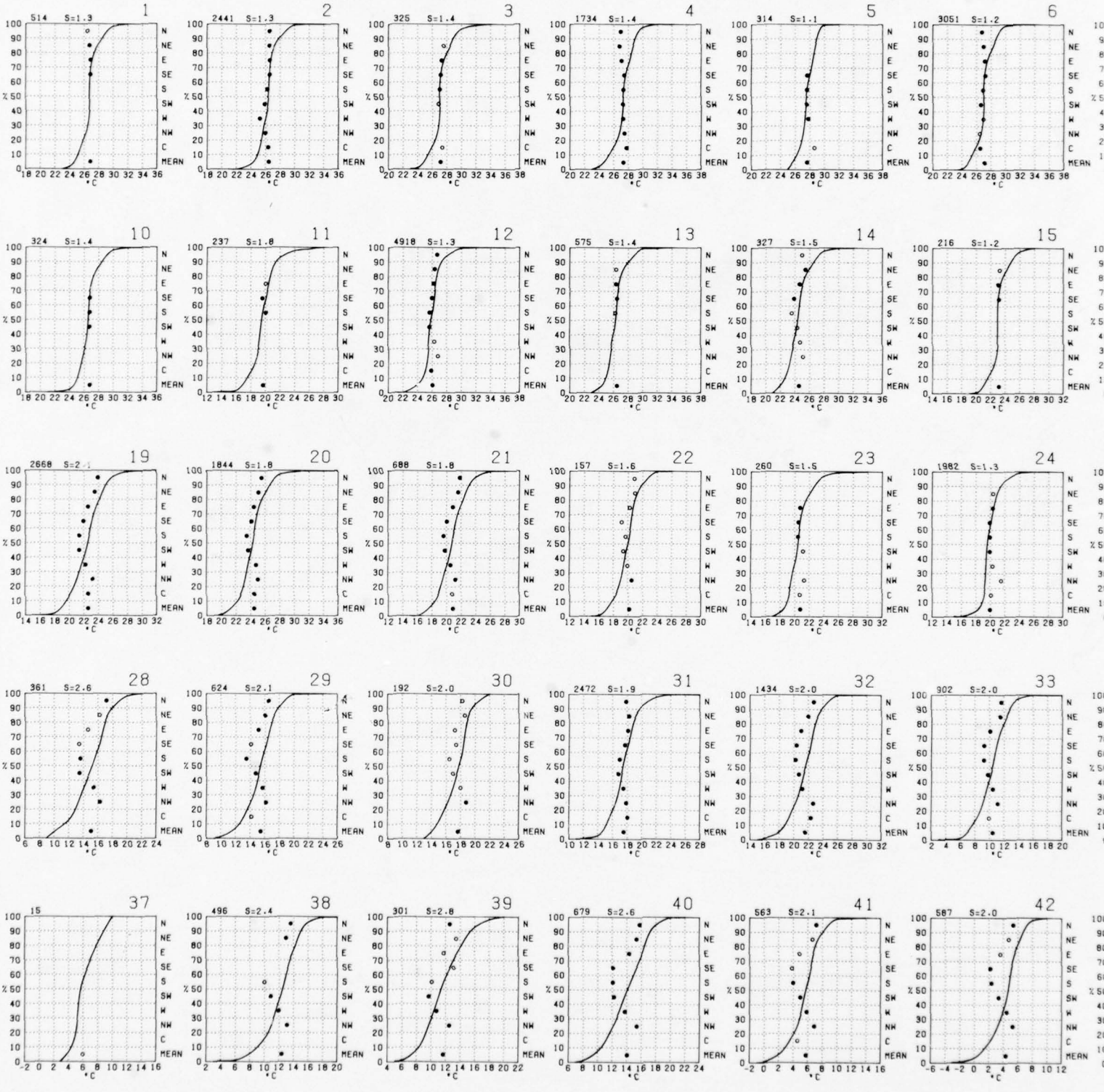
BLACK LINE - Mean air *temperature* (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE



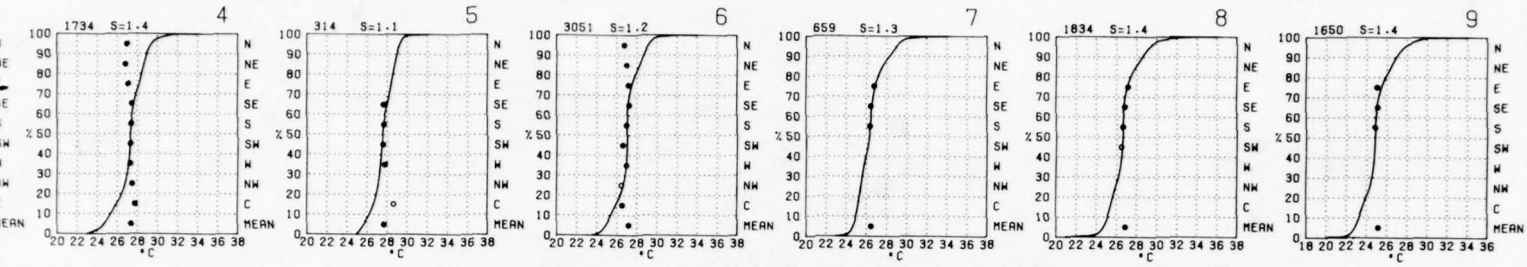
SURFACE AIR TEMPERATURE

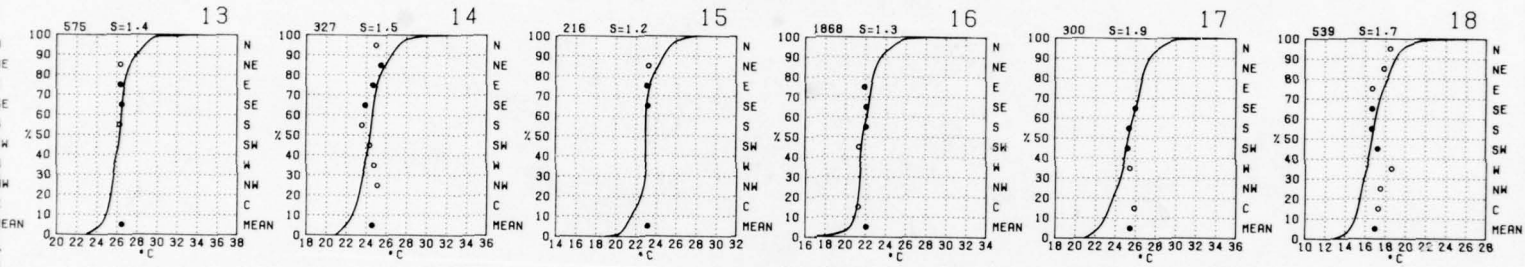


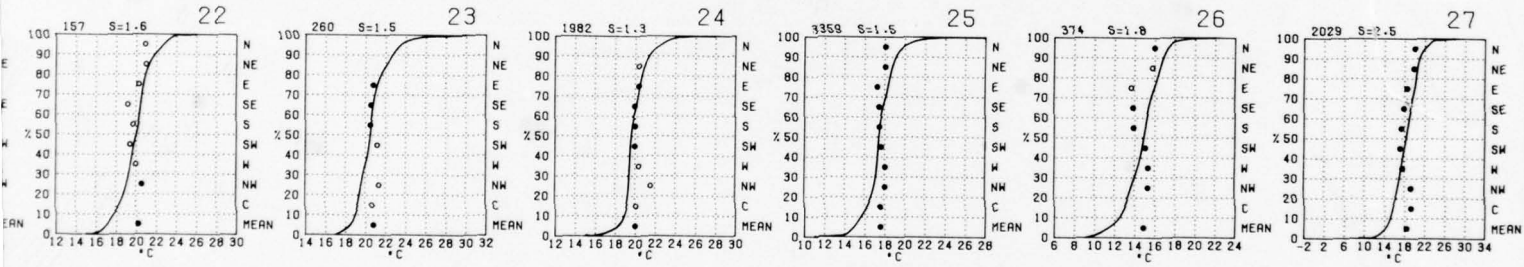
Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

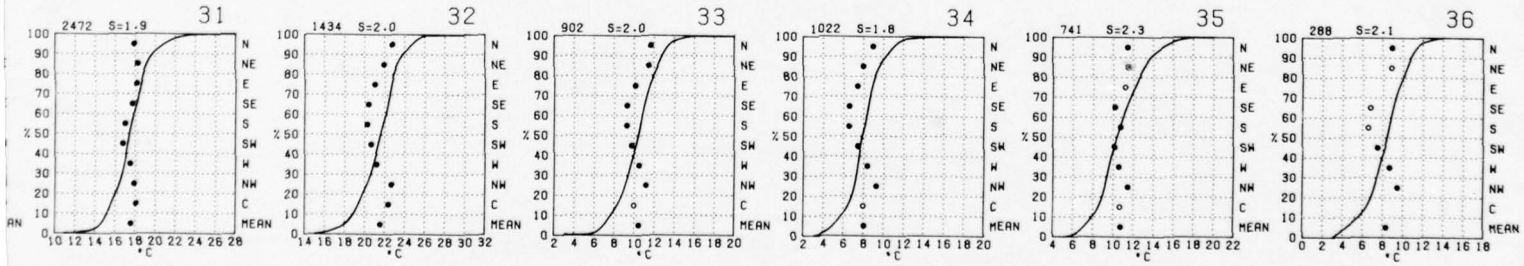
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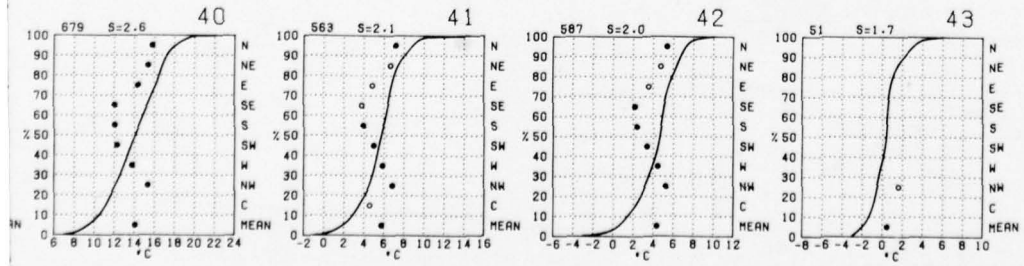
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44

INSUFFICIENT DATA

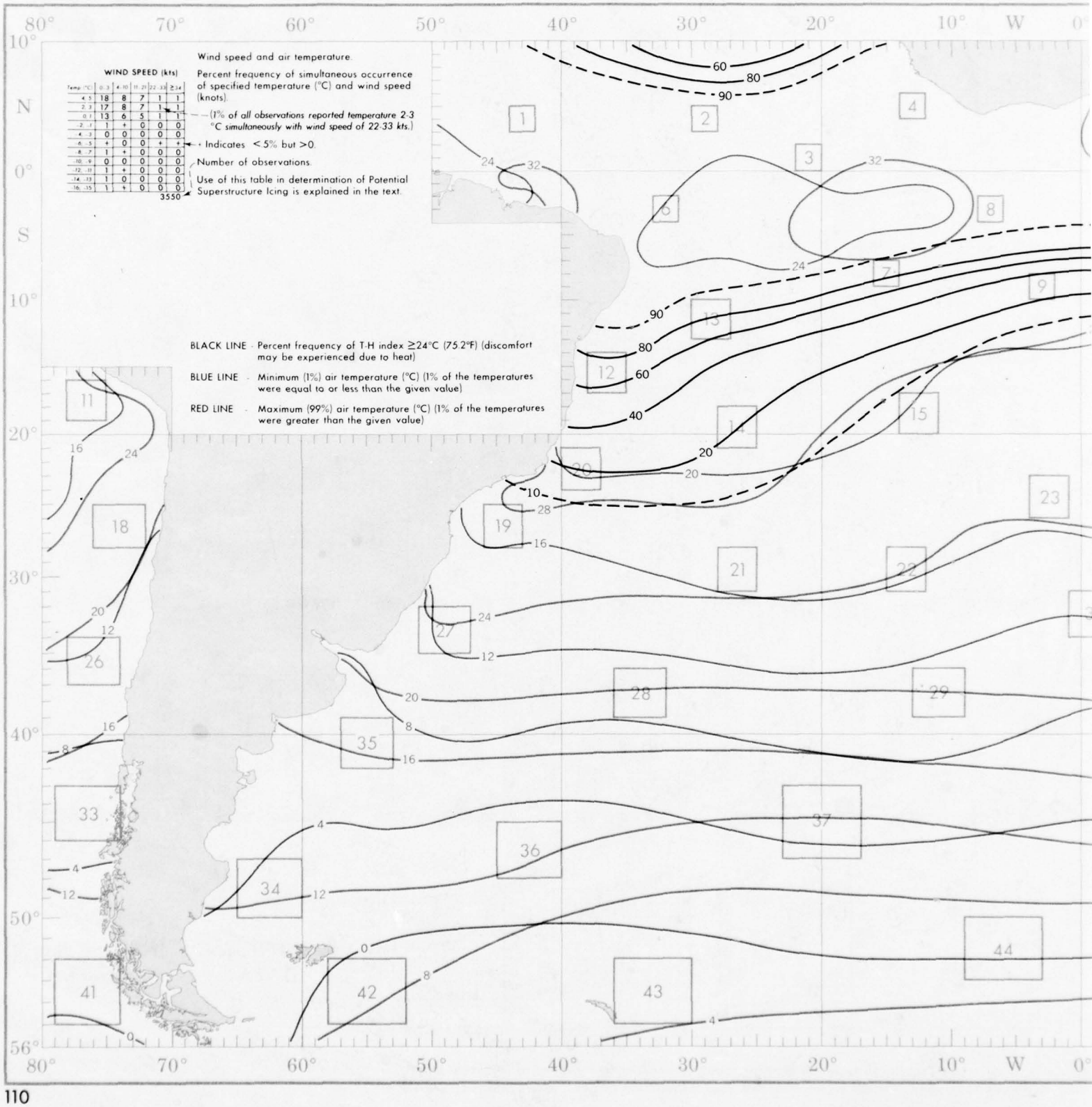
45

INSUFFICIENT DATA

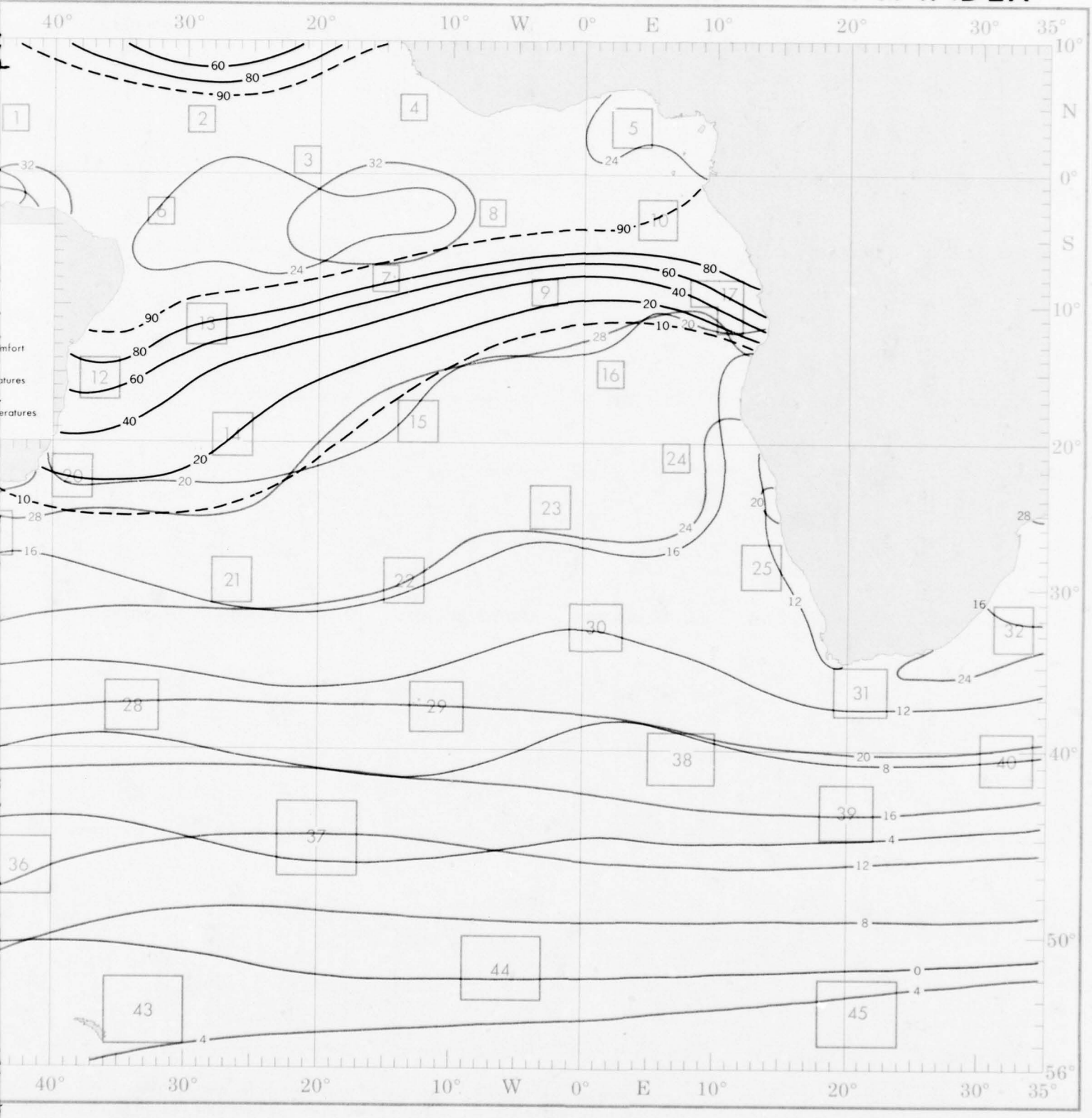
the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY

TEMPERATURE EX



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	2	0	0
28.29	2	11	13	+	0
26.27	3	24	32	2	0
24.25	1	5	3	+	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

516

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	0	0	0	0
32.33	+	+	0	0	0
30.31	+	1	+	0	0
28.29	3	11	4	+	0
26.27	11	37	14	+	0
24.25	5	9	3	+	0
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

2455

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	1	0	0
30.31	2	2	0	0	0
28.29	6	16	9	1	0
26.27	7	34	16	+	0
24.25	2	3	2	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

325

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	4	+	0	0
28.29	13	27	4	+	0
26.27	9	25	7	+	0
24.25	1	5	2	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1830

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	1	3	0	0	0
28.29	7	43	9	0	1
26.27	3	22	7	0	0
24.25	0	2	2	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

315

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	2	1	0	0
28.29	2	19	15	1	0
26.27	5	27	21	1	0
24.25	1	3	2	+	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3060

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	2	1	0	0
28.29	1	17	6	+	0
26.27	4	33	23	1	0
24.25	1	6	3	0	0
22.23	0	2	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

324

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	1	0	0
26.27	0	+	0	0	0
24.25	0	1	+	0	0
22.23	+	4	4	+	0
20.21	3	20	19	1	0
18.19	1	17	17	2	+
16.17	1	2	3	0	0
14.15	0	0	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

237

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	+	0	0
32.33	+	+	+	0	0
30.31	+	1	+	+	0
28.29	1	6	3	+	0
26.27	5	30	21	3	+
24.25	2	13	10	3	+
22.23	+	1	1	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4936

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	+	0
30.31	0	1	1	+	0
28.29	1	6	9	3	0
26.27	1	11	36	12	0
24.25	0	5	12	1	+
22.23	0	+	1	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

575

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	0	+	0
28.29	+	3	1	0	0
26.27	2	11	6	+	0
24.25	5	22	25	4	0
22.23	2	6	8	2	0
20.21	+	1	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

327

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	3	4	0	0
24.25	+	12	12	1	0
22.23	4	25	30	3	0
20.21	1	3	2	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

216

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	0	0	0
28.29	+	1	+	0	0
26.27	1	3	2	+	+
24.25	2	11	11	2	+
22.23	3	16	15	4	+
20.21	1	8	8	3	+
18.19	+	2	2	1	+
16.17	+	+	+	+	+
14.15	0	0	0	+	0
12.13	0	0	0	0	0

2677

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	0	0	0
30.31	+	+	+	0	0
28.29	+	2	1	+	0
26.27	3	10	8	2	0
24.25	5	22	17	3	+
22.23	2	10	9	2	+
20.21	1	1	1	1	+
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1844

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	+	0
24.25	+	2	3	1	+
22.23	2	7	14	7	1
20.21	2	9	18	10	2
18.19	1	6	6	4	1
16.17	0	+	1	1	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

688

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	1	0	0
24.25	0	1	0	0	0
22.23	0	7	8	8	0
20.21	6	20	20	3	1
18.19	3	10	8	3	0
16.17	0	2	2	1	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

159

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	0	0	0
26.27	0	0	1	0	0
24.25	+	3	0	+	0
22.23	1	12	6	1	0
20.21	6	27	24	2	0
18.19	1	7	8	+	0
16.17	0	1	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

262

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	1	1	+	0
22.23	1	4	5	+	0
20.21	3	18	26	5	+
18.19	1	12	17	4	+
16.17	0	+	1	+	+
14.15	0	0	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1998

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	1	+	0
20.21	+	0	1	1	0
18.19	1	2	5	4	1
16.17	2	4	11	12	4
14.15	4	7	8	5	3
12.13	+	4	4	6	1
10.11	+	0	3	3	+
8.9	0	0	0	1	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

361

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	+	+	0	0
20.21	0	+	+	+	+
18.19	+	2	5	5	1
16.17	2	8	14	10	3
14.15	2	9	10	7	3
12.13	1	2	4	5	1
10.11	+	1	1	1	1
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

629

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	2	1	0	0
20.21	2	8	4	2	1
18.19	3	18	15	4	0
16.17	4	10	12	3	1
14.15	1	6	2	2	1
12.13	0	1	2	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

193

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	+	0	+	+
22.23	1	1	1	+	+
20.21	1	5	3	2	+
18.19	5	13	10	6	3
16.17	4	12	11	7	3
14.15	1	3	3	2	1
12.13	+	+	+	1	+
10.11	0	0	+	0	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2481

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	+	+	0	0	0
26.27	+	+	+	+	+
24.25	1	4	6	3	1
22.23	4	11	15	7	1
20.21	2	9	11	5	1
18.19	1	4	4	3	2
16.17	0	+	1	1	1
14.15	0	0	0	0	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1444

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	+	0	0
16.17	0	0	+	0	0
14.15	+	1	1	2	1
12.13	1	8	12	5	2
10.11	2	12	16	7	2
8.9	2	6	8	4	1
6.7	1	1	3	2	+
4.5	+	0	+	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

903

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	20	7	0
6.7	0	0	20	0	0
4.5	0	0	20	27	0
2.3	0	0	7	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

15

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	0	+	+
16.17	+	2	2	2	1
14.15	2	3	6	11	5
12.13	+	6	15	10	5
10.11	1	2	6	6	4
8.9	+	1	2	3	1
6.7	0	+	1	1	1
4.5	0	0	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

496

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	2	+	0	1	0
16.17	1	3	2	2	+
14.15	0	2	3	8	3
12.13	1	6	5	5	2
10.11	1	6	9	8	6
8.9	1	1	5	7	3
6.7	0	0	1	2	2
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

301

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	1	0
18.19	0	2	3	2	1
16.17	1	6	11	6	2
14.15	2	6	10	5	3
12.13	1	5	9	7	2
10.11	1	2	5	3	2
8.9	+	1	1	1	1
6.7	0	0	0	0	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

679

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	0	+
10.11	+	1	1	1	1
8.9	0	2	4	4	3
6.7	1	4	12	10	13
4.5	1	4	6	9	7
2.3	1	2	3	2	2
0.1	1	1	1	0	+
-2.-1	0	0	0	0	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

563

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	1	2	1
6.7	1	3	12	11	4
4.5	3	6	18	11	6
2.3	+	3	5	4	3
0.1	0	1	2	2	2
-2.-1	0	0	1	1	+
-4.-3	0	0	+	+	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

587

Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was

...PERATURE

MAY

4

...P (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	4	+	0	0
28.29	13	27	4	+	0
26.27	9	25	7	+	0
24.25	1	5	2	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1830

5

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	1	3	0	0	0
28.29	7	43	9	0	1
26.27	3	22	7	0	0
24.25	0	2	2	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

315

6

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	2	1	0	0
28.29	2	19	15	1	0
26.27	5	27	21	1	0
24.25	1	3	2	+	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3060

7

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	1	0	0
30.31	0	1	1	0	0
28.29	+	5	11	1	0
26.27	+	16	43	3	0
24.25	0	4	13	1	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

659

8

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
34.35	0	+	+	0	0
32.33	0	+	+	0	0
30.31	+	2	1	0	0
28.29	+	9	12	+	0
26.27	1	25	37	1	0
24.25	+	5	4	+	0
22.23	+	+	+	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1835

9

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	1	+	0	0
28.29	+	2	3	+	0
26.27	+	10	18	1	0
24.25	+	22	35	2	+
22.23	+	2	2	+	0
20.21	0	+	+	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1650

13

...P (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	0	+	0
30.31	0	1	1	+	0
28.29	1	6	9	3	0
26.27	1	11	36	12	0
24.25	0	5	12	1	+
22.23	0	+	1	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

575

14

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	0	+	0
28.29	+	3	1	0	0
26.27	2	11	6	+	0
24.25	5	22	25	4	0
22.23	2	6	8	2	0
20.21	+	1	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

327

15

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	3	4	0	0
24.25	+	12	12	1	0
22.23	4	25	30	3	0
20.21	1	3	2	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

216

16

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	+	+	+	0
26.27	+	1	1	+	0
24.25	+	5	5	+	0
22.23	2	21	30	2	0
20.21	2	15	14	1	0
18.19	+	+	+	+	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1876

17

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	+	2	1	0	0
28.29	2	9	2	0	0
26.27	5	24	8	0	0
24.25	3	22	9	1	0
22.23	+	10	3	0	0
20.21	+	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

301

18

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	0	+	0
24.25	0	0	0	0	0
22.23	1	+	+	+	0
20.21	2	4	1	+	0
18.19	6	11	8	1	0
16.17	6	23	17	3	0
14.15	3	6	5	2	0
12.13	0	+	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

539

22

...P (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	1	0	0
24.25	0	1	0	0	0
22.23	0	7	8	8	0
20.21	6	20	20	3	1
18.19	3	10	8	3	0
16.17	0	2	2	1	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

159

23

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	0	0	0
26.27	0	0	1	0	0
24.25	+	3	0	+	0
22.23	1	12	6	1	0
20.21	6	27	24	2	0
18.19	1	7	8	+	0
16.17	0	1	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

262

24

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	1	1	+	0
22.23	1	4	5	+	0
20.21	3	18	26	5	+
18.19	1	12	17	4	+
16.17	0	+	1	+	+
14.15	0	0	0	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1998

25

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	0	0	0
24.25	+	+	+	0	0
22.23	+	1	+	+	0
20.21	1	4	2	1	+
18.19	4	18	16	4	1
16.17	4	16	17	5	1
14.15	+	2	2	1	+
12.13	0	+	+	+	+
10.11	0	+	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

3411

26

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	1	1	3	+	0
16.17	5	14	11	3	1
14.15	8	15	15	4	1
12.13	+	4	5	5	+
10.11	0	1	1	1	0
8.9	+	+	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

374

27

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	+	+	0	0
24.25	+	+	+	+	0
22.23	1	3	4	2	+
20.21	3	10	9	3	1
18.19	2	10	11	5	3
16.17	2	6	8	4	2
14.15	+	2	2	2	2
12.13	+	+	+	1	1
10.11	0	+	+	+	0
8.9	0	0	0	+	0

2031

31

...P (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	+	0	+	+
22.23	1	1	1	+	+
20.21	1	5	3	2	+
18.19	5	13	10	6	3
16.17	4	12	11	7	3
14.15	1	3	3	2	1
12.13	+	+	+	1	+
10.11	0	0	+	0	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2481

32

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	+	+	0	0	0
26.27	+	+	+	+	+
24.25	1	4	6	3	1
22.23	4	11	15	7	1
20.21	2	9	11	5	1
18.19	1	4	4	3	2
16.17	0	+	1	1	1
14.15	0	0	0	0	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1444

33

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	+	0	0
16.17	0	0	+	0	0
14.15	+	1	1	2	1
12.13	1	8	12	5	2
10.11	2	12	16	7	2
8.9	2	6	8	4	1
6.7	1	1	3	2	+
4.5	+	0	+	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

903

34

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	+	+	0
14.15	+	+	+	+	+
12.13	+	1	2	+	+
10.11	1	4	6	4	2
8.9	2	11	18	9	5
6.7	2	8	11	4	5
4.5	+	1	1	1	1
2.3	0	+	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

1022

35

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	+	+	0
16.17	+	1	1	1	0
14.15	1	3	5	1	1
12.13	2	8	7	4	1
10.11	3	12	13	5	2
8.9	3	7	6	3	2
6.7	1	1	1	1	1
4.5	0	+	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

741

36

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
14.15	0	0	0	0	+
12.13	0	0	2	1	1
10.11	0	6	11	10	3
8.9	2	4	11	9	10
6.7	0	4	8	4	3
4.5	0	1	3	3	1
2.3	0	0	1	0	1
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

288

40

...(°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	1	0
18.19	0	2	3	2	1
16.17	1	6	11	6	2
14.15	2	6	10	5	3
12.13	1	5	9	7	2
10.11	1	2	5	3	2
8.9	+	1	1	1	1
6.7	0	0	0	0	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

679

41

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	0	+
10.11	+	1	1	1	1
8.9	0	2	4	4	3
6.7	1	4	12	10	13
4.5	1	4	6	9	7
2.3	1	2	3	2	2
0.1	1	1	1	0	+
-2.-1	0	0	0	0	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

563

42

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	1	2	1
6.7	1	3	12	11	4
4.5	3	5	18	11	6
2.3	+	3	5	4	3
0.1	0	1	2	2	2
-2.-1	0	0	1	1	+
-4.-3	0	0	+	+	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

587

43

TEMP (°C)	WIND SPEED (KTS) 0-3	4-10	11-21	22-33	≥ 34
4.5	0	2	2	2	0
2.3	2	4	8	8	0
0.1	2	2	14	14	8
-2.-1	0	6	18	4	4
-4.-3	0	2	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0

51

44

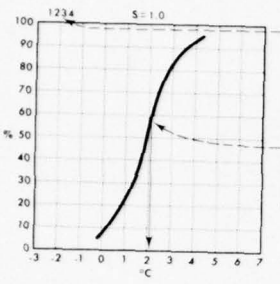
INSUFFICIENT DATA

45

INSUFFICIENT DATA

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

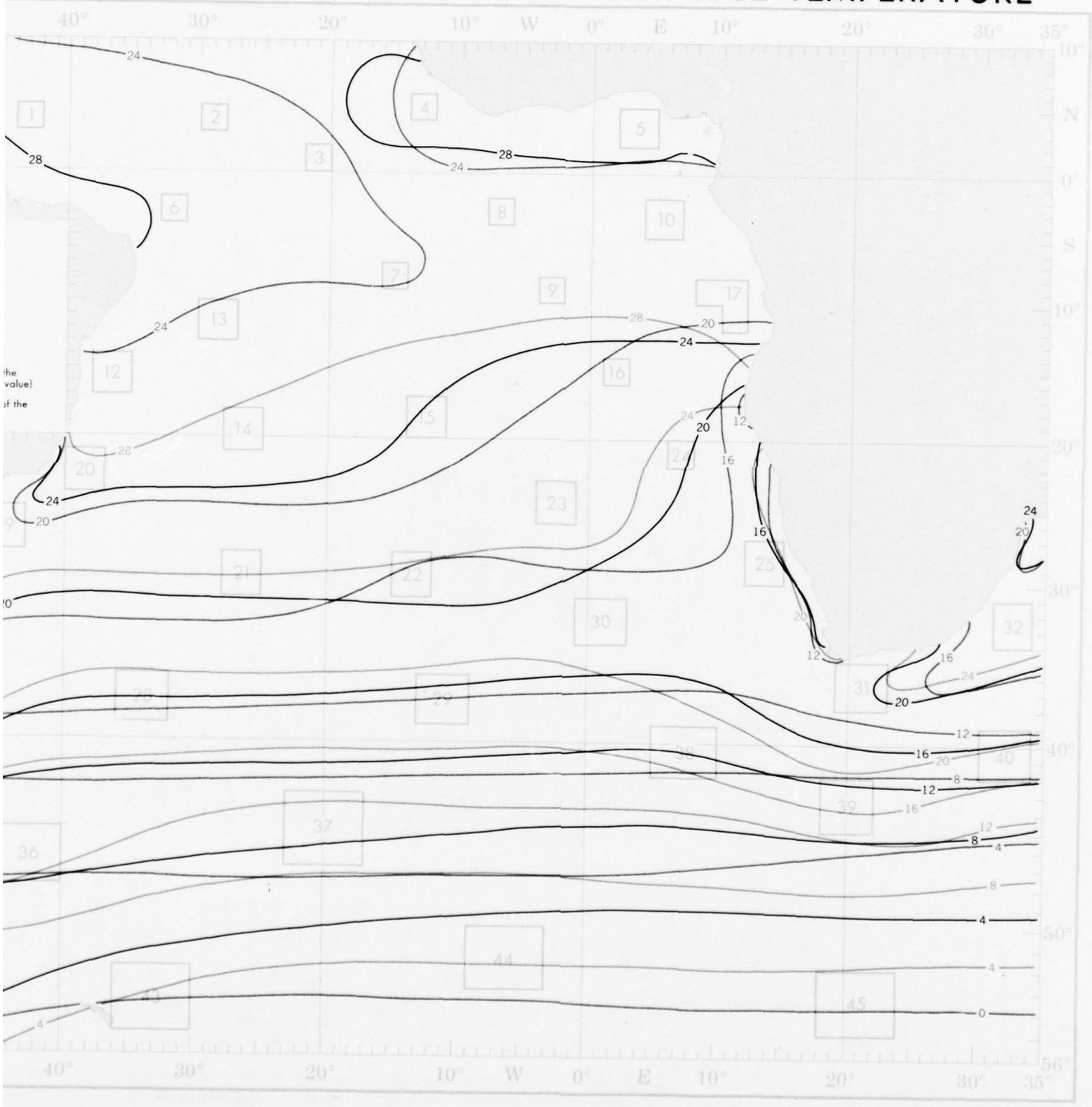
S=Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

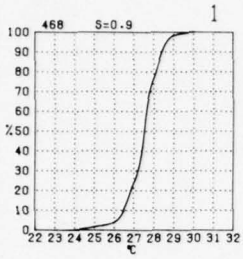
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

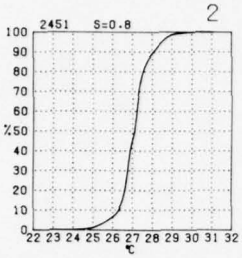
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

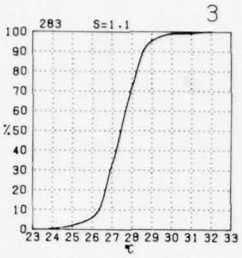
SEA SURFACE TEMPERATURE

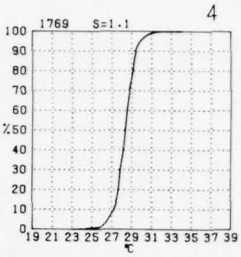


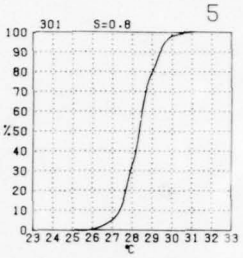
SEA SURFACE TEMPERATURE

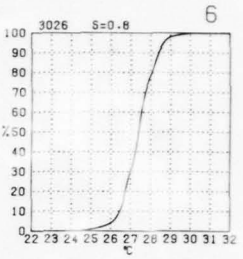


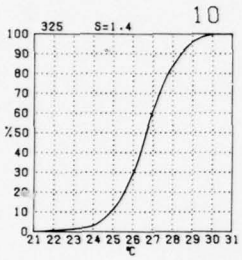


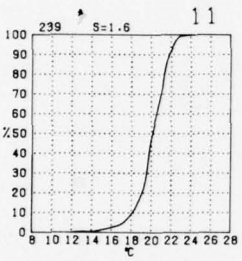


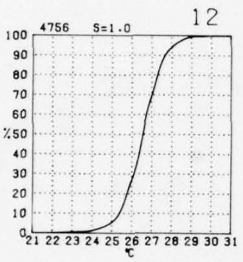


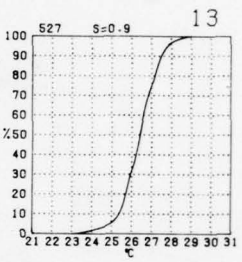


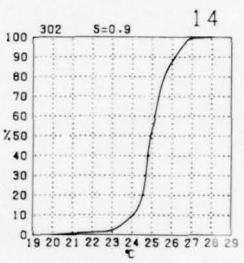


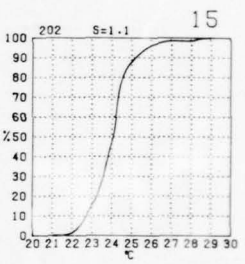


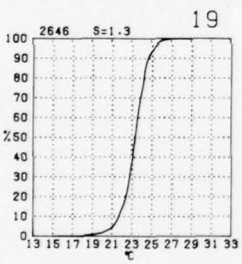


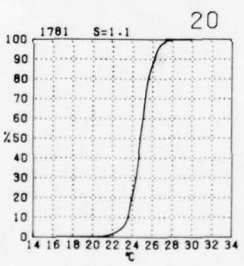


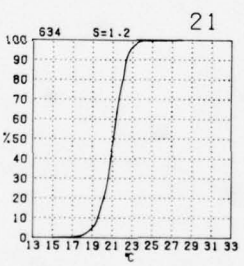


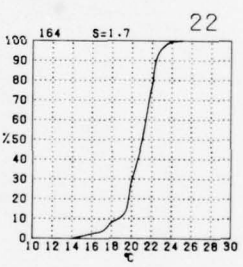


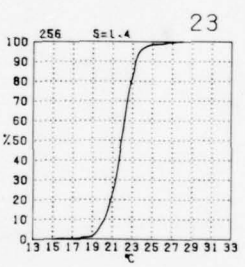


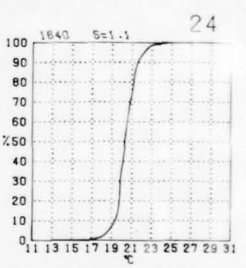


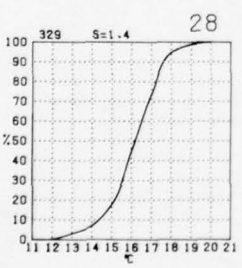


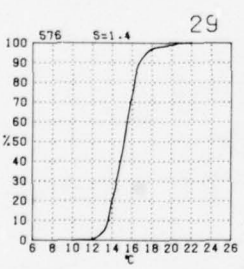


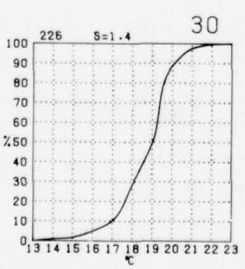


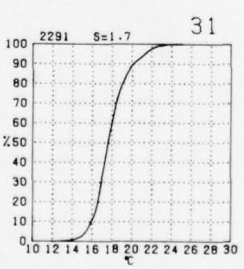


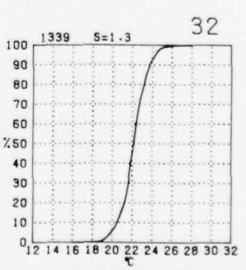


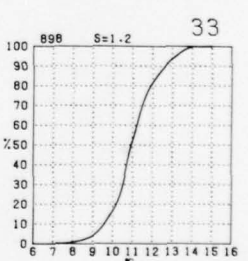






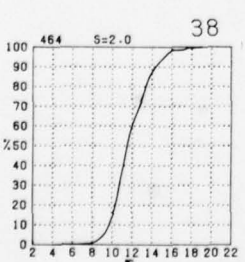


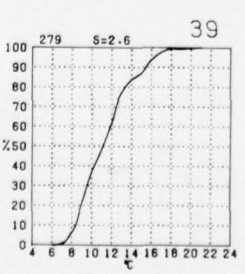


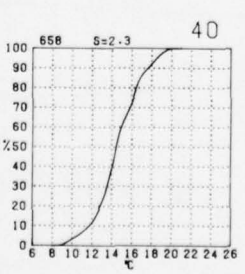


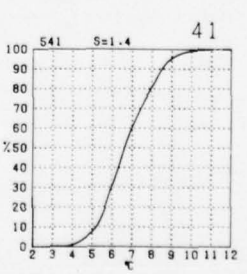
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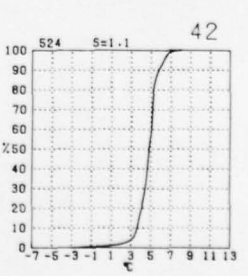
INSUFFICIENT DATA





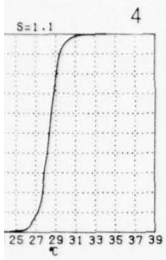


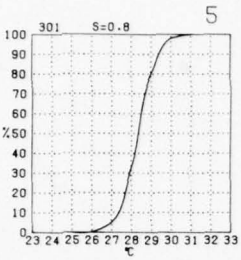


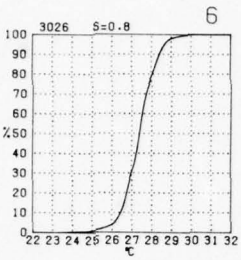


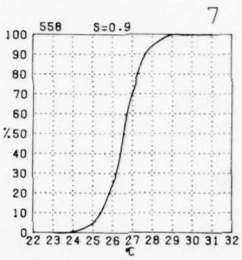
Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

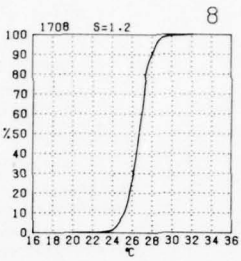
MAY

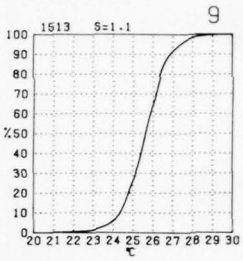


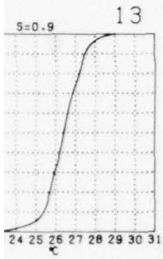


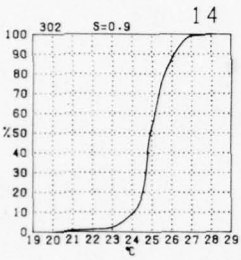


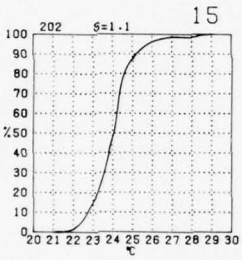


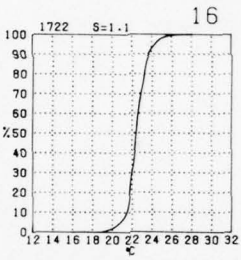


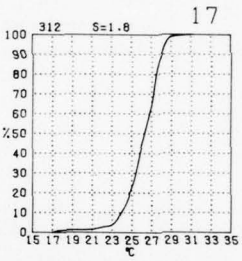


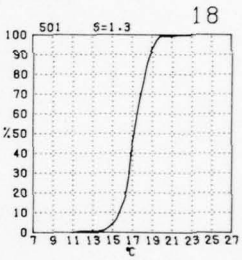


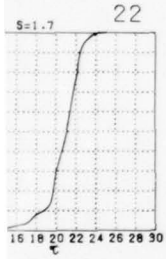


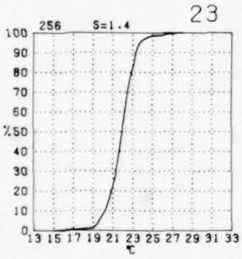


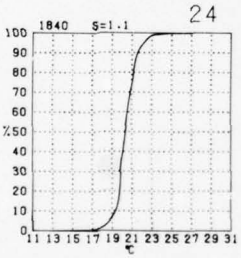


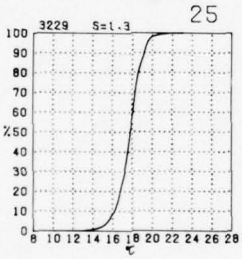


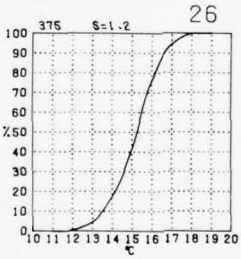


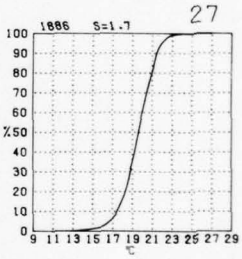


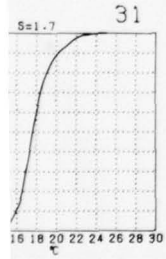


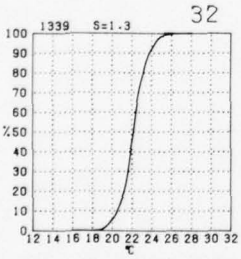


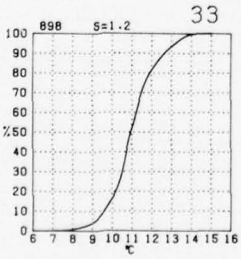


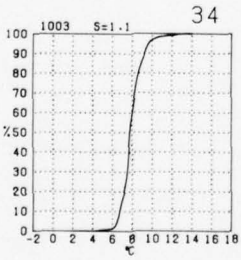


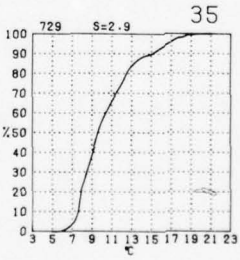


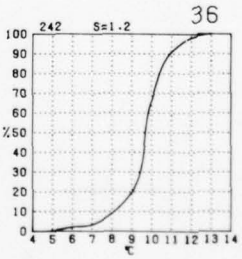


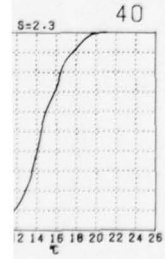


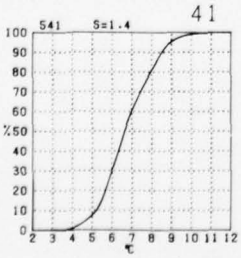


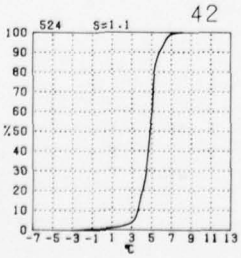


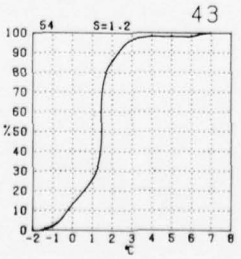












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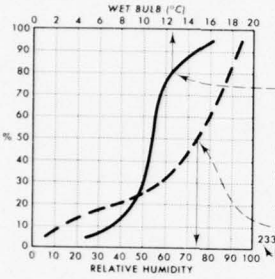
INSUFFICIENT DATA

45

INSUFFICIENT DATA

ve compilation of available data for specified areas without regard to suspected biases.
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MAY



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of *all observed wet-bulb temperatures were* ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

(50% of *all observed relative humidities were* ≤74%.)

Number of observations.

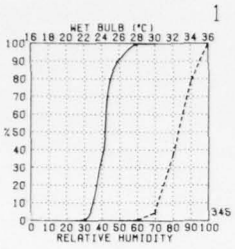
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

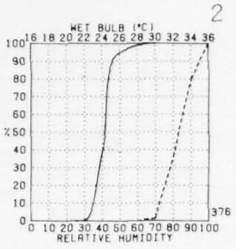
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

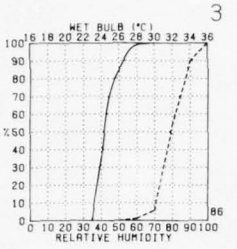
HUMIDITY

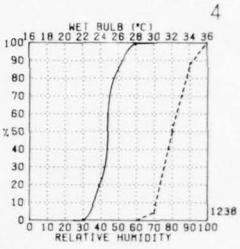

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 28 20 28 20 16 24 12 16 24 20 12 8 24 12 8 20 16 4 12 0 8 4 4
computed
computed

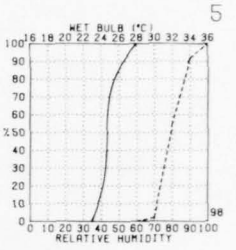
WET BULB AND RELATIVE HUMIDITY

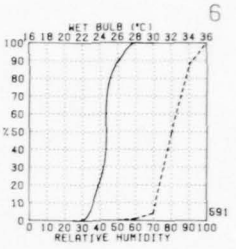


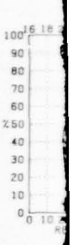


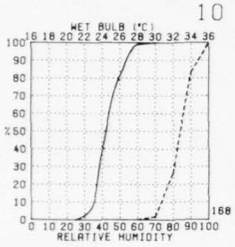


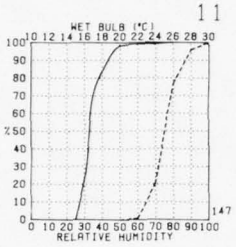


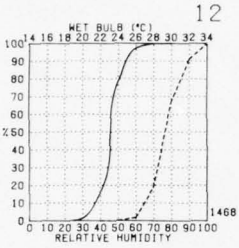


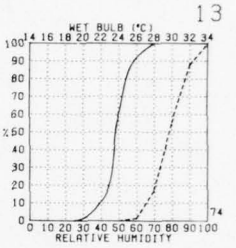






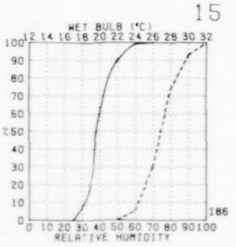


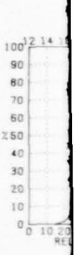


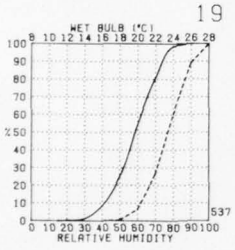


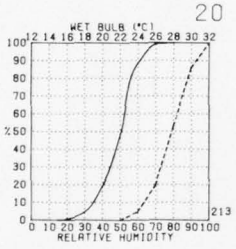
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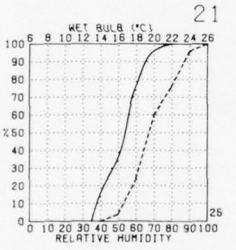
INSUFFICIENT DATA

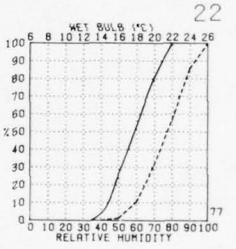


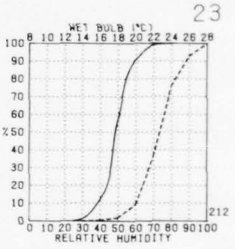


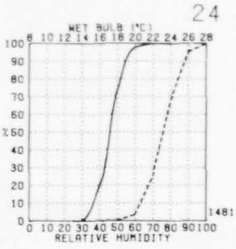


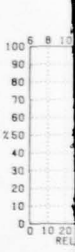


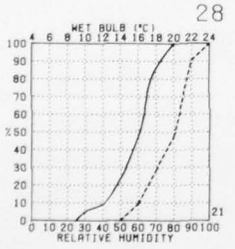


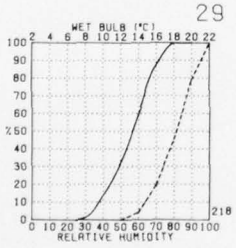


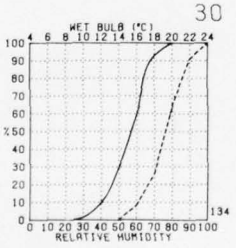


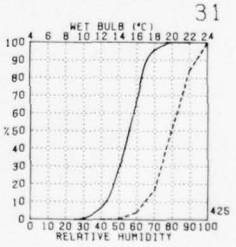


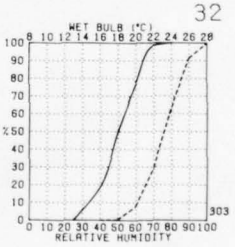


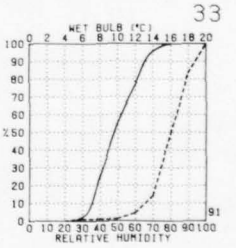


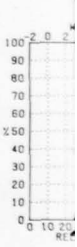






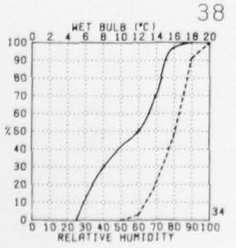






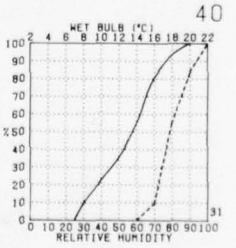
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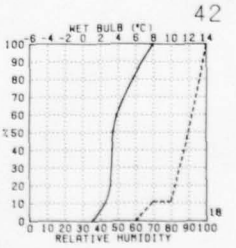
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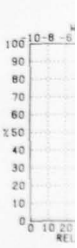
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41

INSUFFICIENT DATA



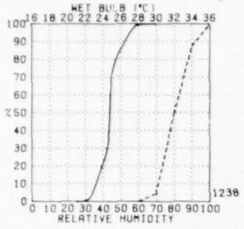


Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

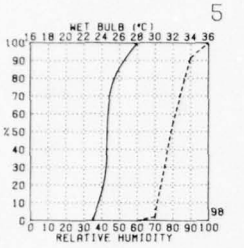
E HUMIDITY

MAY

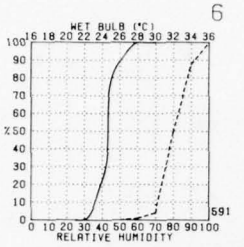
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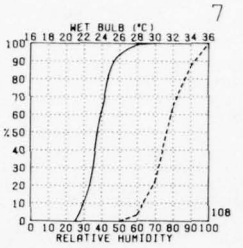
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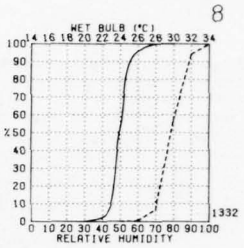
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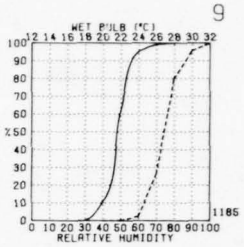
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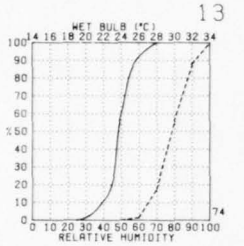
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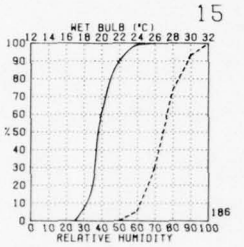
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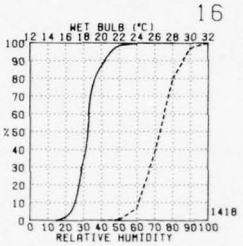
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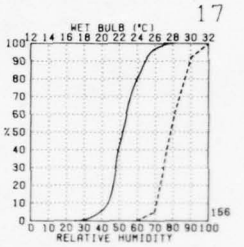
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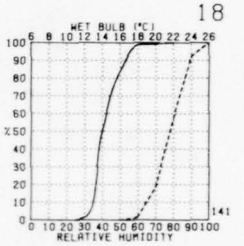
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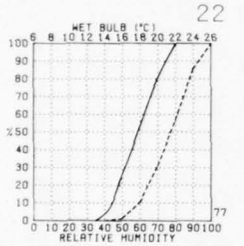
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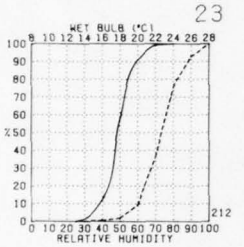
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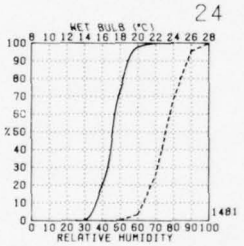
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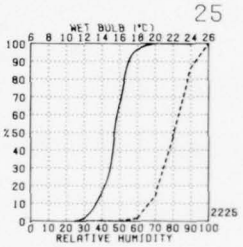
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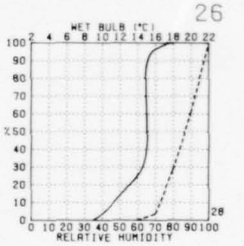
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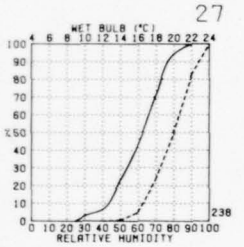
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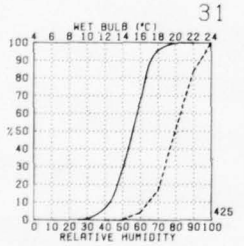
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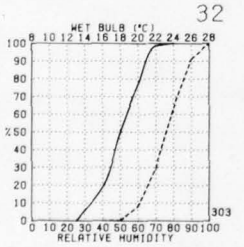
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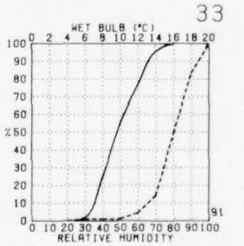
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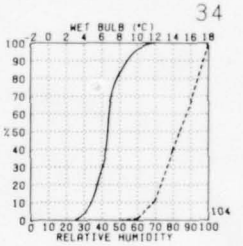
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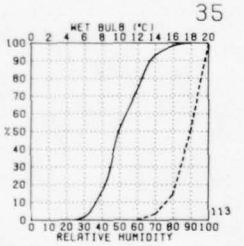
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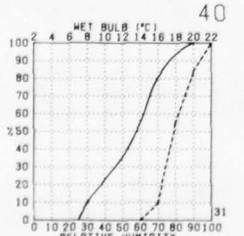
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36

INSUFFICIENT DATA

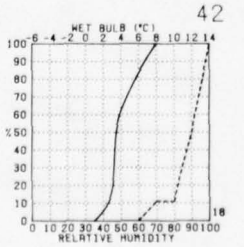
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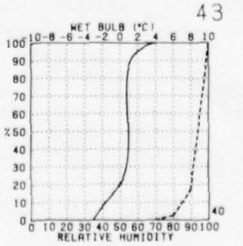
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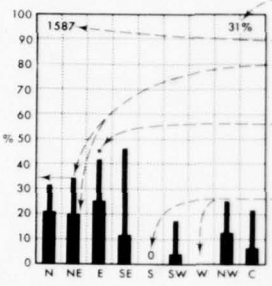
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t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

RED LINE - Percent frequency of observations reporting precipitation

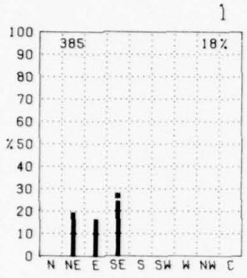
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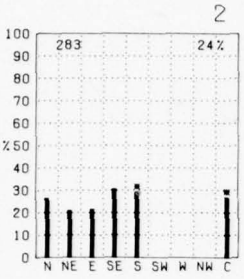


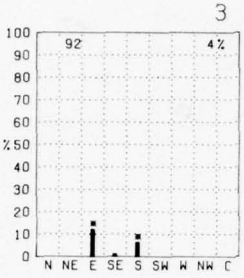
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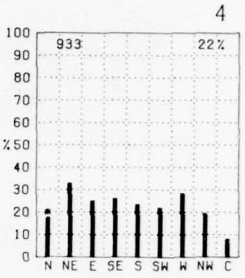
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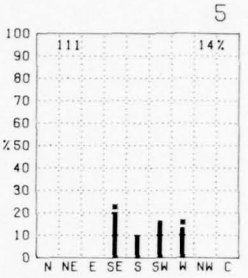
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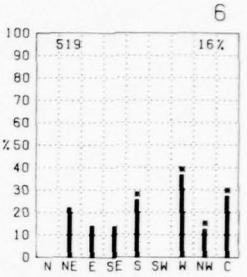


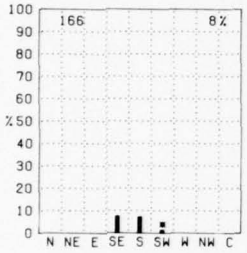


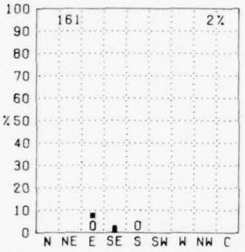


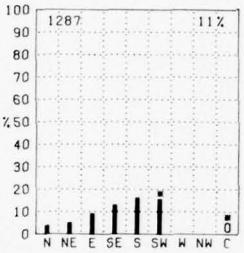


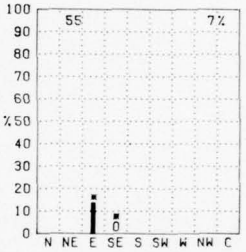


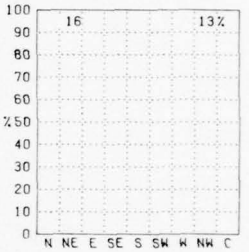


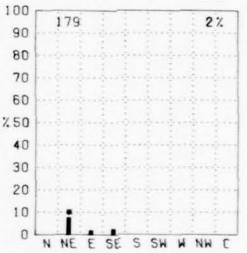


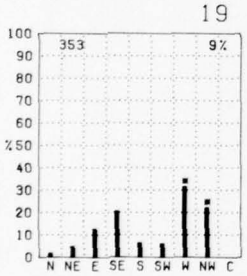


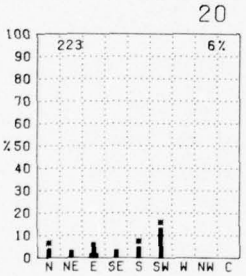


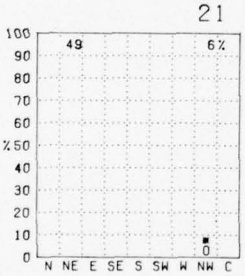


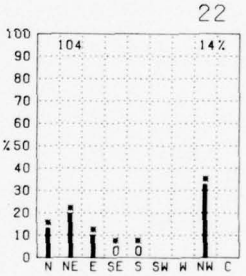


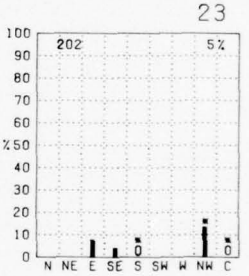


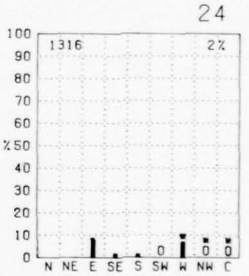


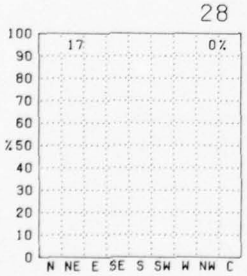


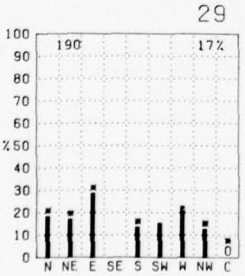


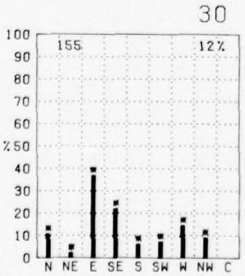


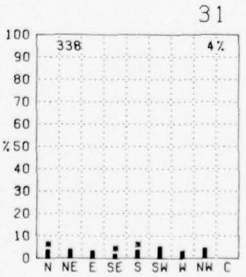


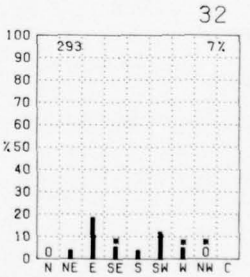


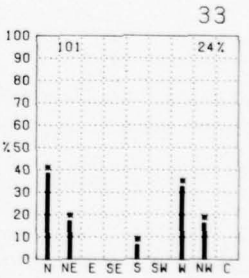






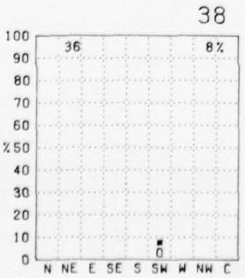






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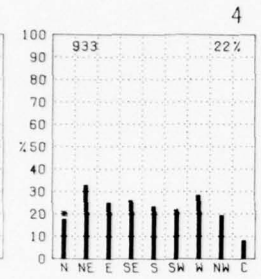
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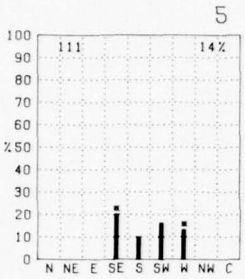
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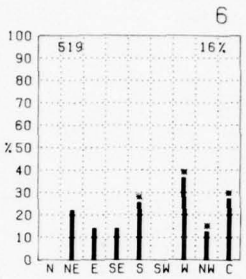
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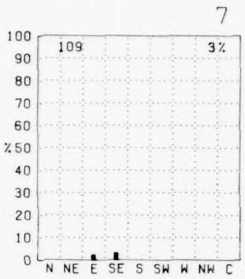
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

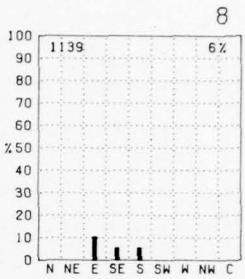
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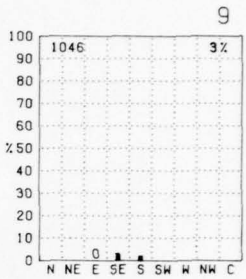


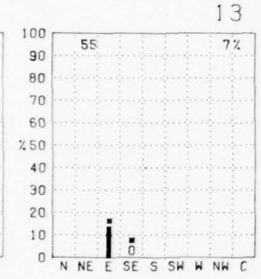


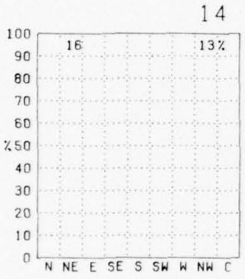


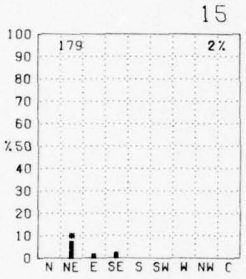


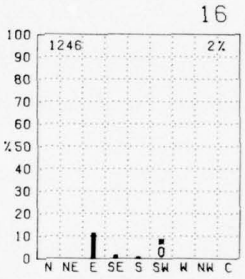


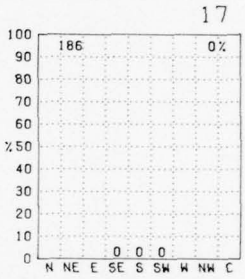


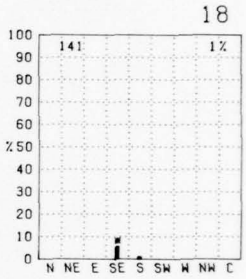


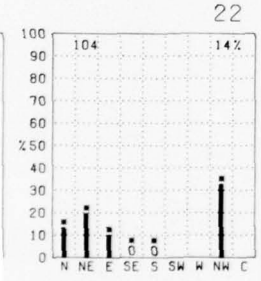


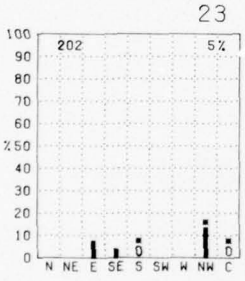


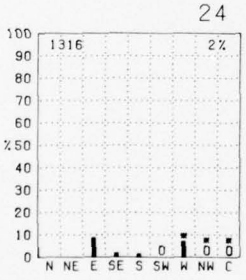


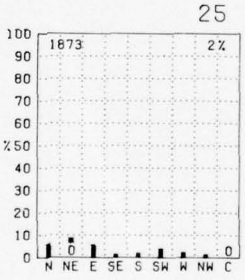


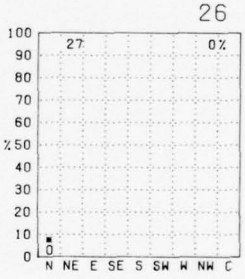


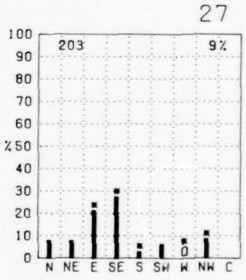


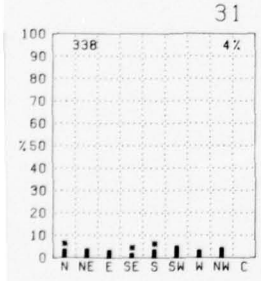


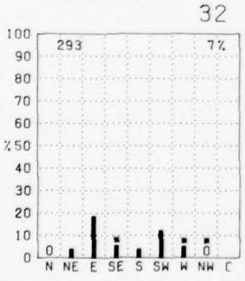


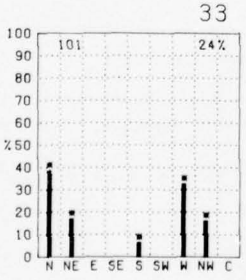


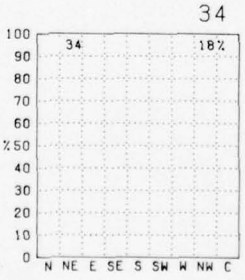


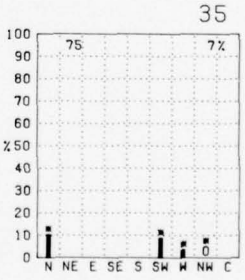












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INSUFFICIENT DATA

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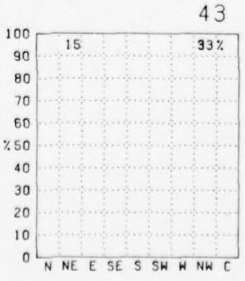
INSUFFICIENT DATA

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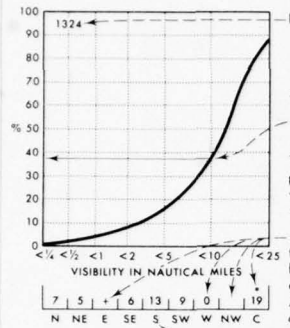
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

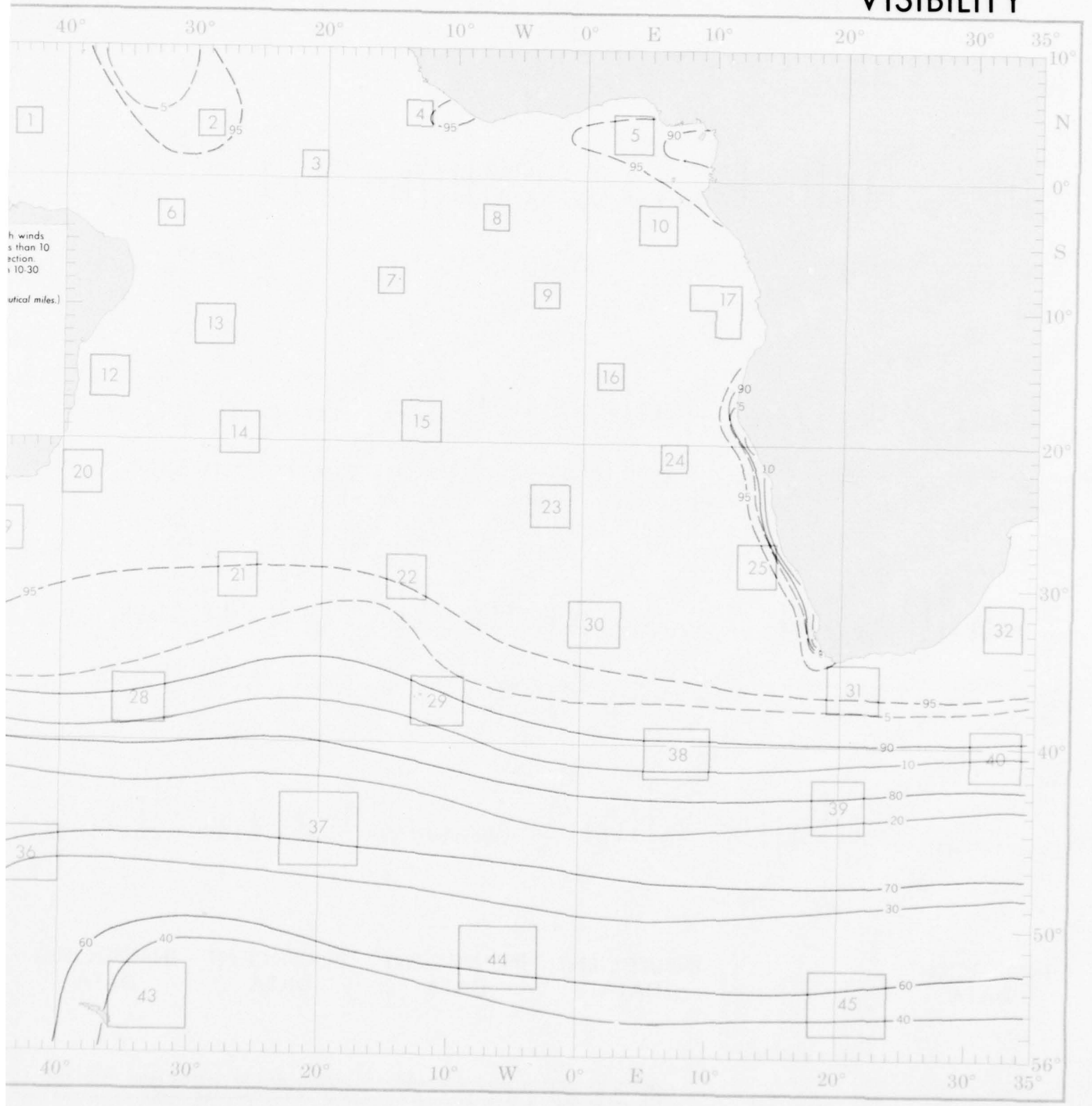
+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

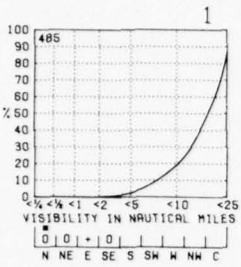
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

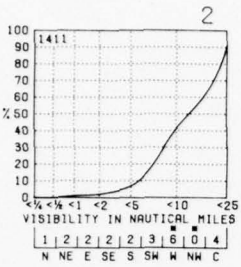
RED LINE - Percent frequency of visibilities <2 nautical miles

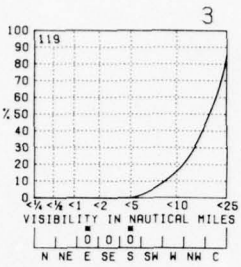
VISIBILITY

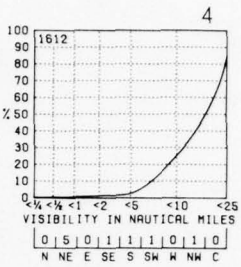

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W
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N
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S
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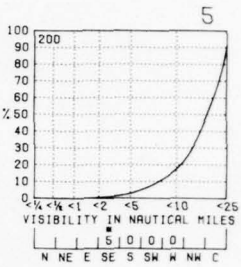
VISIBILITY

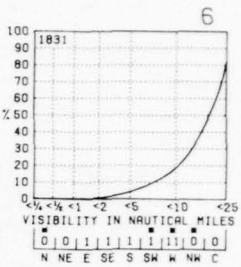


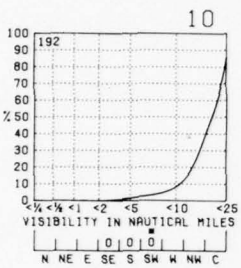


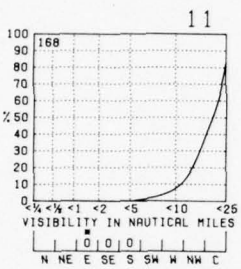


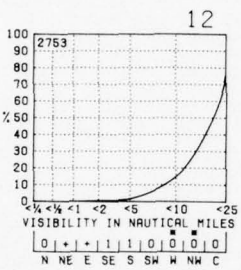


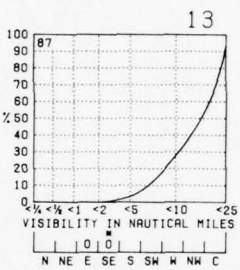


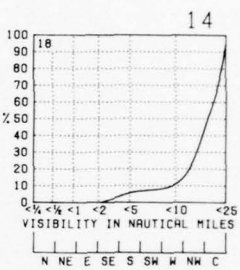


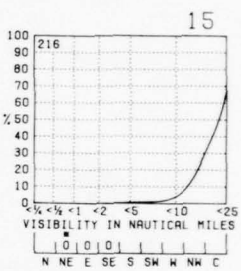


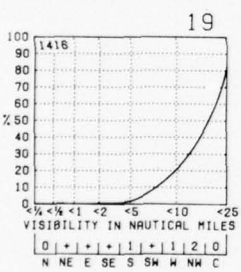


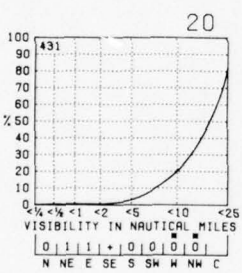


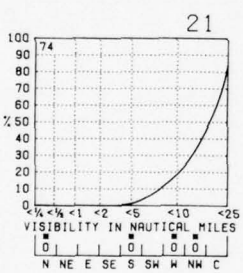


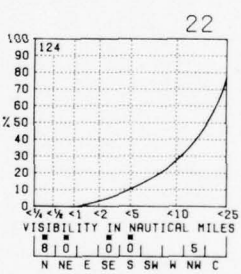


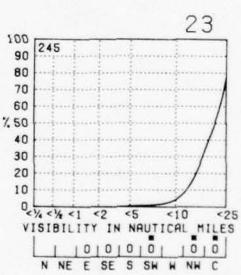


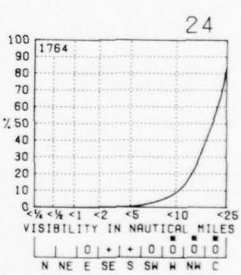


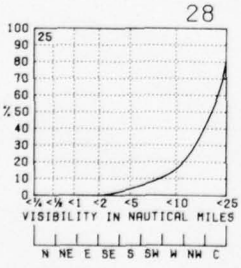


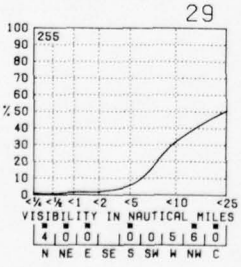


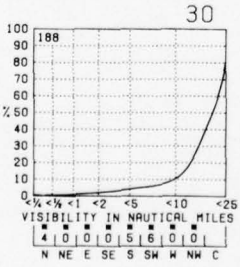


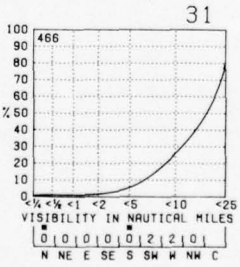


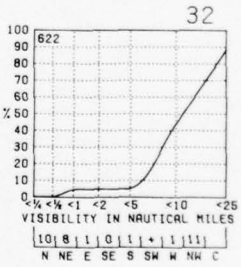


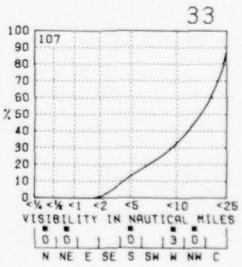


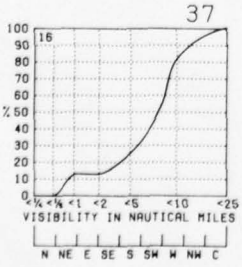


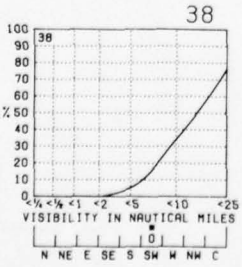






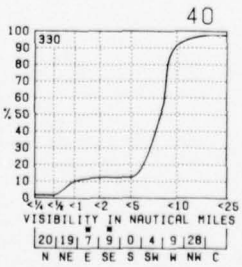






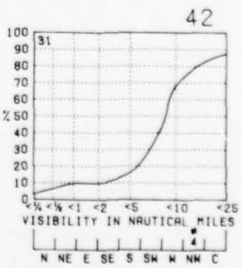
39

INSUFFICIENT DATA



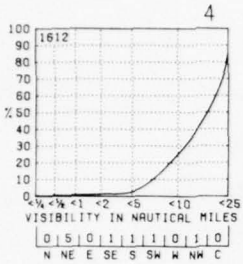
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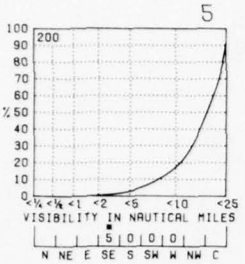
INSUFFICIENT DATA

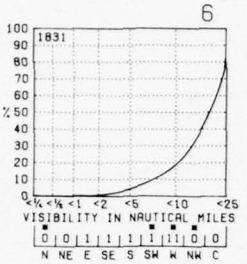


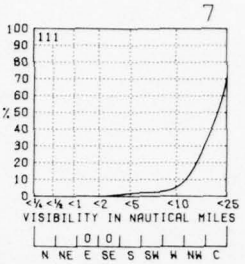
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

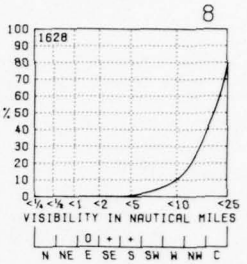
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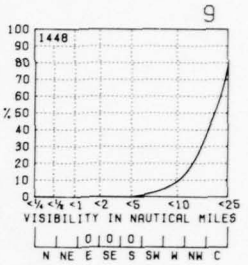


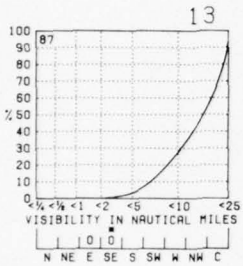


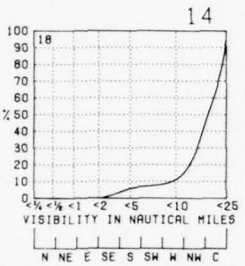


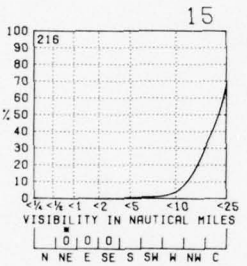


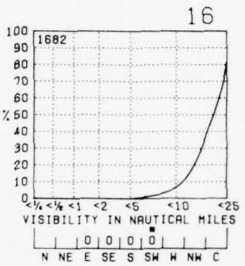


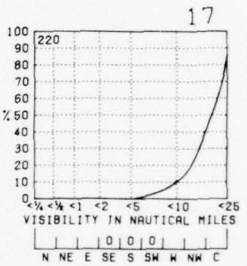


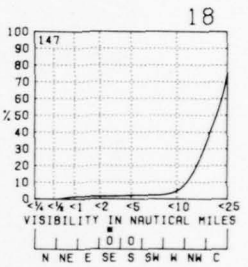


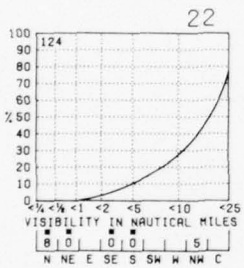


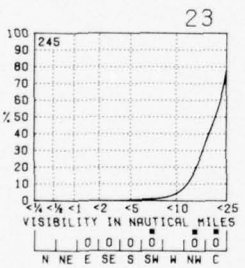


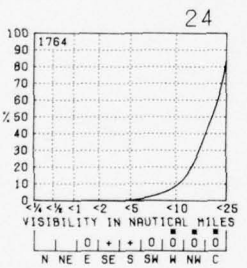


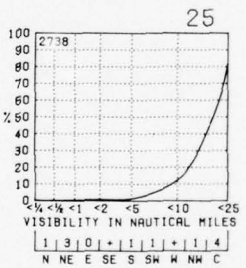


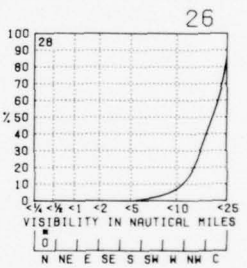


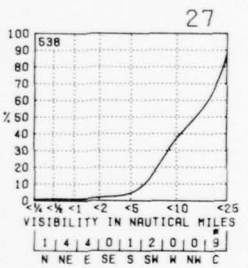


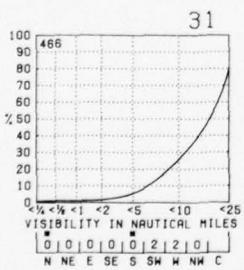


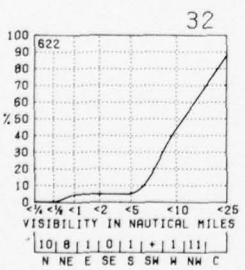


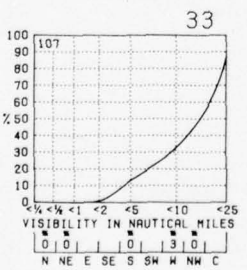


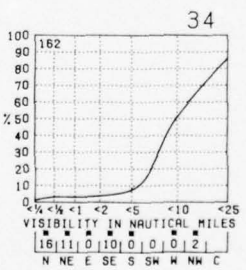


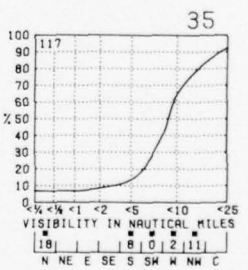






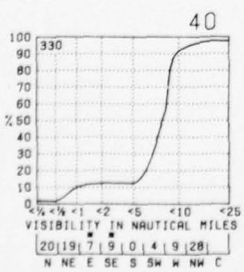






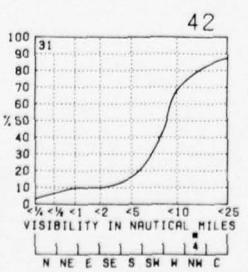
36

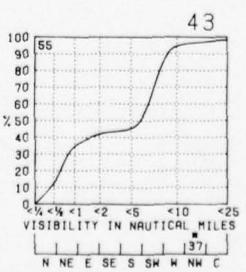
INSUFFICIENT DATA



41

INSUFFICIENT DATA





44

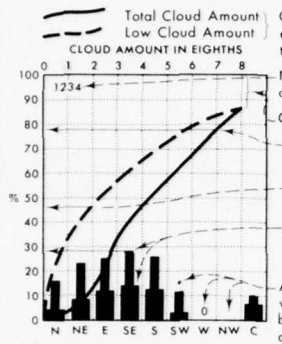
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

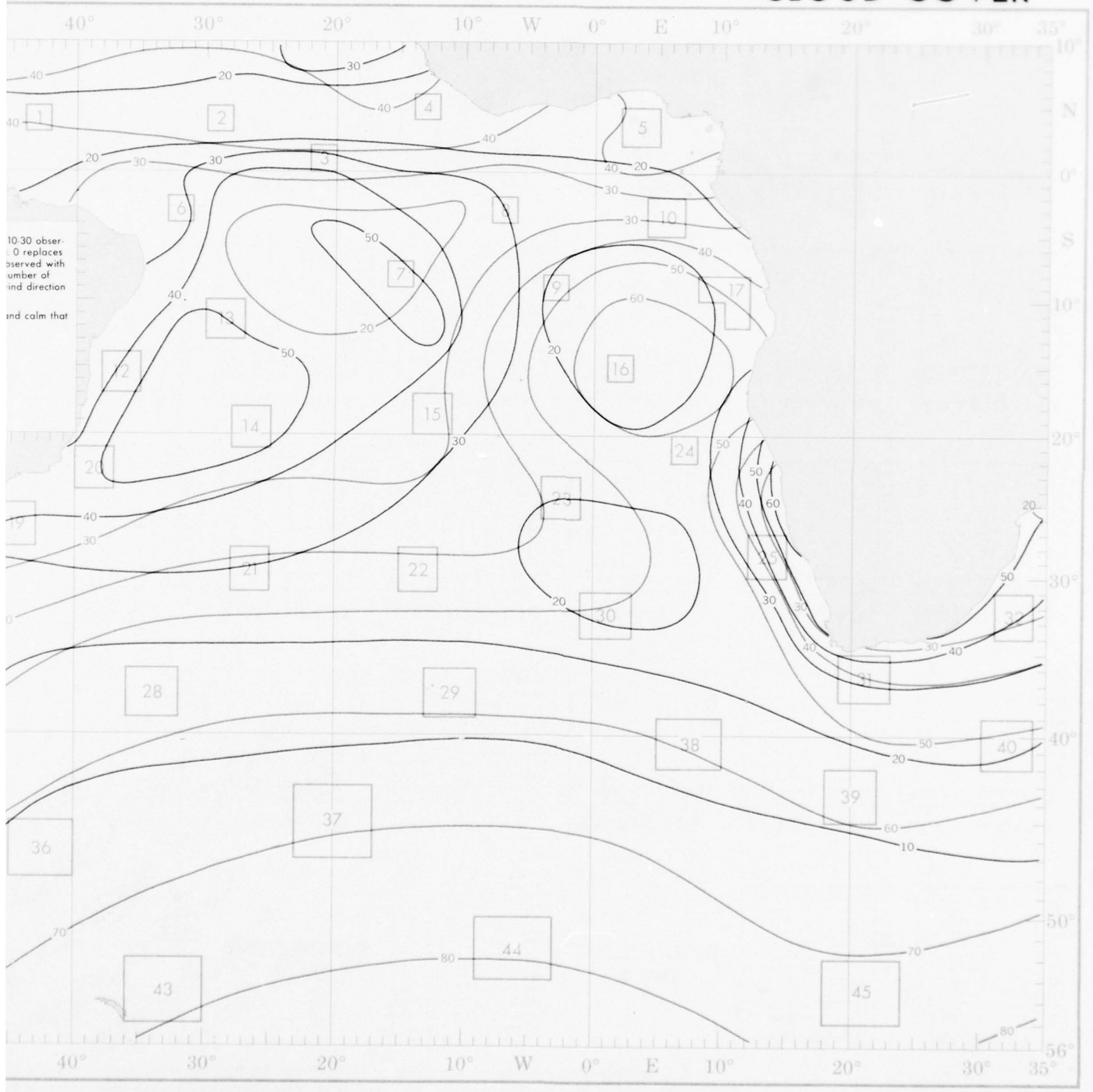


Low cloud amount. Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8. Low clouds are clouds with bases <8000 feet.

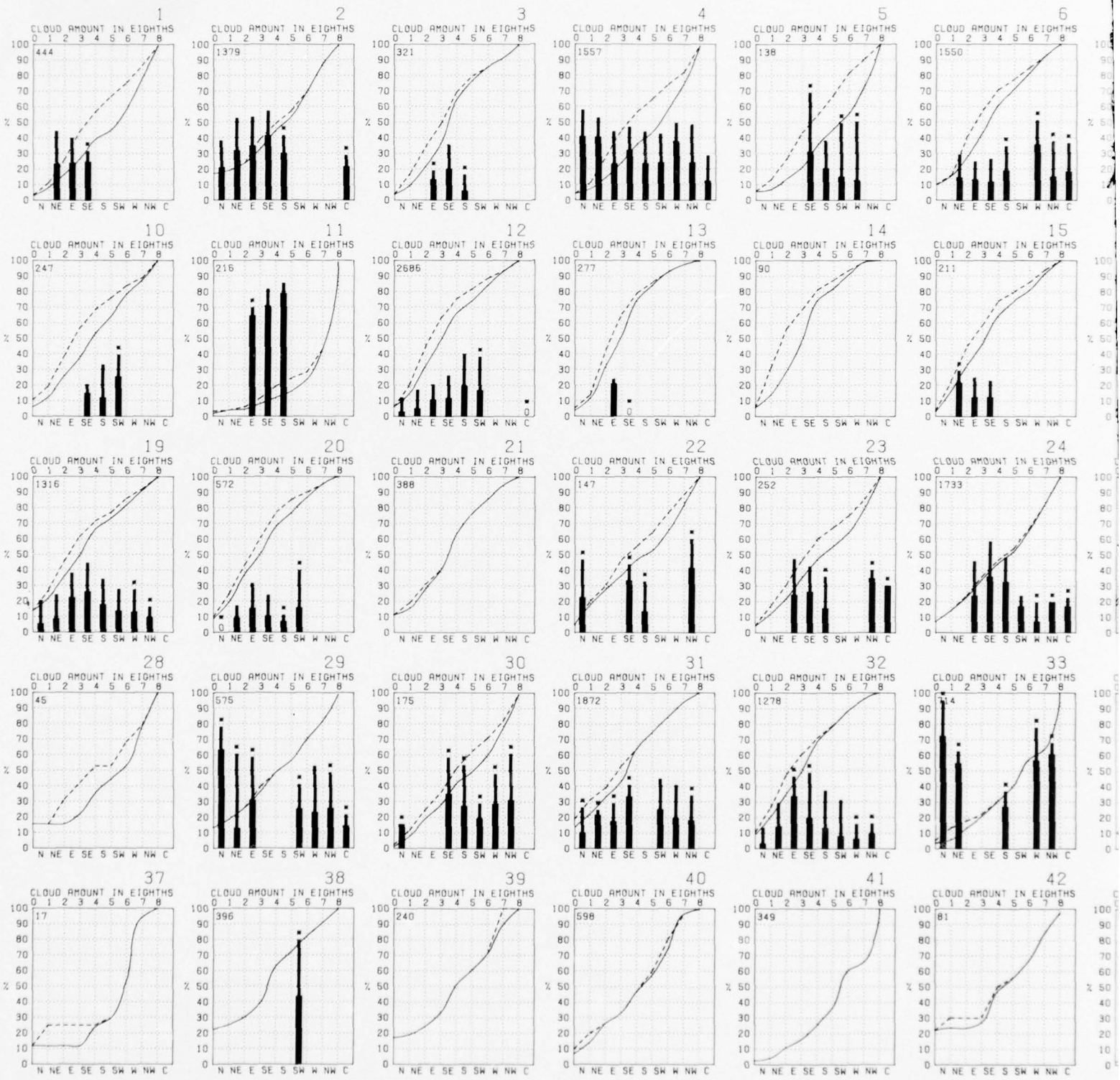
BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

CLOUD COVER

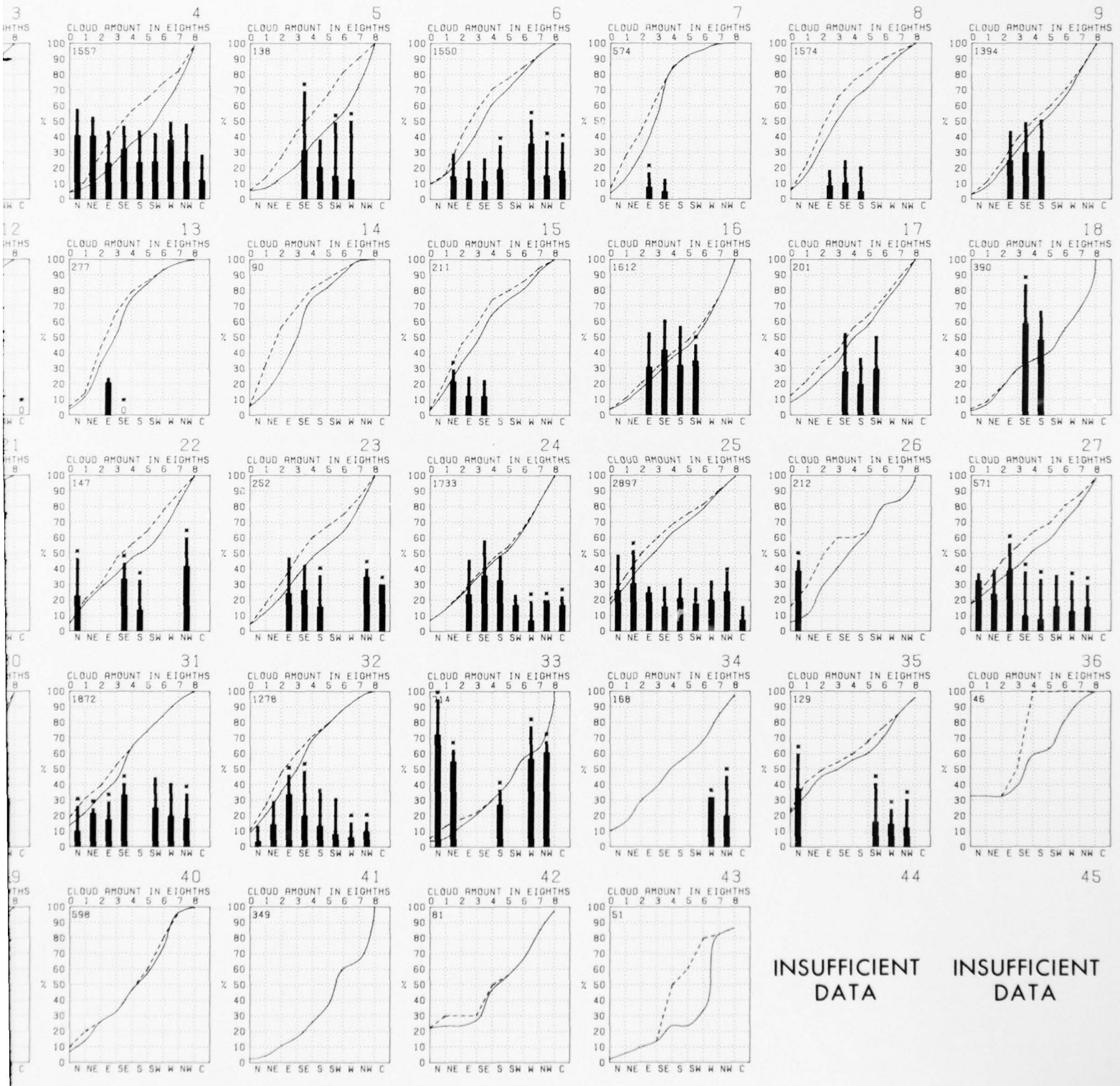

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 36 37 38 39 40 43 44 45
10-30 obser-
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nd calm that

CLOUD COVER



Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

MAY



44

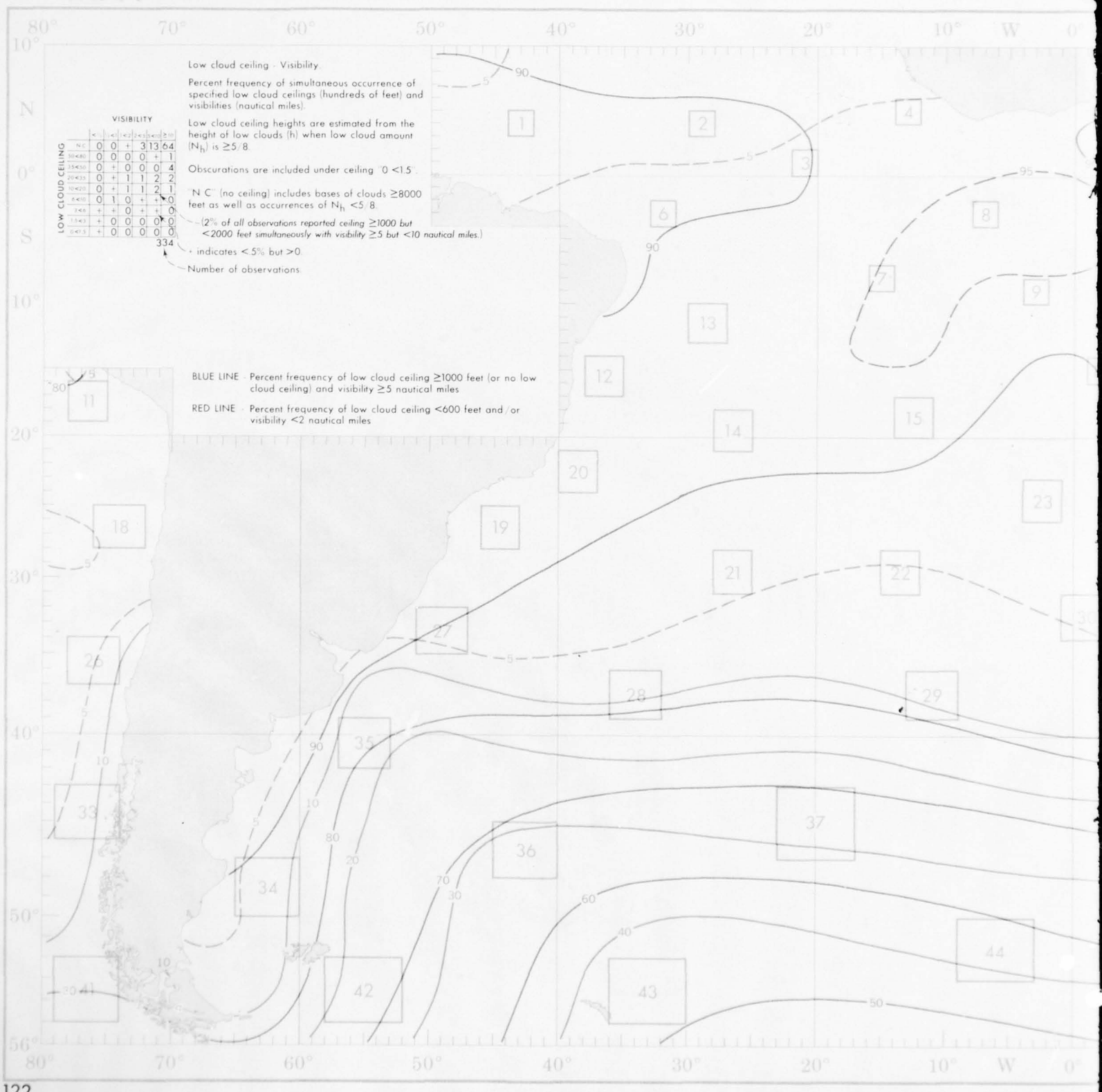
INSUFFICIENT DATA

45

INSUFFICIENT DATA

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates <.5% but >0.
Number of observations.
VISIBILITY
LOW CLOUD CEILING
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 6 7 8 9 11 12 13 14 15 18 19 20 21 22 23 26 27 28 29 33 34 35 36 37 41 42 43 44
5 90 95 80 10 20 30 40 50 60 70

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	7
10<20	0	0	+	1	3	11
6<10	0	0	0	1	3	8
3<6	0	0	0	0	2	2
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	+	1	1

378

2

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	47
50<80	0	0	0	1	+	2
35<50	0	0	0	1	2	4
20<35	0	0	0	1	2	5
10<20	0	+	0	1	3	15
6<10	0	0	0	+	4	8
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

324

3

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	66
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	2
10<20	0	0	0	0	2	16
6<10	0	0	0	0	4	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

92

4

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	54
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	9
10<20	+	+	+	+	3	13
6<10	0	0	+	+	3	6
3<6	0	0	+	+	+	+
1.5<3	0	0	0	+	0	+
0<1.5	+	0	+	+	0	0

1073

5

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	51
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	0
20<35	0	0	0	0	1	15
10<20	0	0	0	0	3	10
6<10	0	0	0	1	7	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

100

6

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	+	0	2	69
50<80	0	+	0	+	0	1
35<50	0	0	0	+	+	3
20<35	0	0	0	0	1	4
10<20	+	0	+	1	2	5
6<10	0	0	0	1	2	6
3<6	0	+	0	+	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	+

552

10

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	68
50<80	0	0	0	0	1	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	7
10<20	0	0	0	1	3	10
6<10	0	0	0	1	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

156

11

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	18
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	10
10<20	0	0	0	0	3	37
6<10	0	0	0	0	3	21
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	3
0<1.5	0	0	0	0	0	0

145

12

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	74
50<80	0	0	0	+	+	1
35<50	0	0	0	0	+	3
20<35	0	0	0	0	+	4
10<20	0	0	0	+	1	7
6<10	0	0	0	+	2	4
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	+	+
0<1.5	+	0	+	+	0	+

1362

13

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	79
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	2	0
10<20	0	0	0	0	2	5
6<10	0	0	0	2	0	4
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	2	0	0

57

14

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	73
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	7	0	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

15

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	74
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	4
10<20	0	0	0	0	1	8
6<10	0	0	0	0	0	6
3<6	0	0	0	0	1	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

186

19

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	68
50<80	0	0	+	0	+	1
35<50	0	0	0	+	1	4
20<35	0	0	0	+	1	5
10<20	0	0	0	0	2	8
6<10	0	0	0	0	1	2
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

443

20

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	5	71
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	2
20<35	+	0	0	2	1	6
10<20	+	0	0	+	+	3
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

204

21

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	60
50<80	0	0	0	0	4	0
35<50	0	0	0	0	0	5
20<35	0	0	0	0	12	4
10<20	0	0	0	4	0	12
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

25

22

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	55
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	5
10<20	0	0	0	0	3	14
6<10	0	0	1	0	6	7
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

71

23

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	59
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	0	+	21
6<10	0	0	0	0	1	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

205

24

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	0	1	45
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	+	13
10<20	0	0	0	0	+	26
6<10	0	0	0	0	+	6
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1374

28

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	50
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	17
10<20	0	0	0	0	0	17
6<10	0	0	0	0	0	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

18

29

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	46
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	5
20<35	0	0	0	1	2	5
10<20	0	0	1	1	1	18
6<10	0	0	0	2	3	7
3<6	0	0	0	2	3	1
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	1	0

175

30

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	48
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	11
10<20	0	0	0	0	0	18
6<10	0	0	0	0	1	16
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	1	0	1	0	0	0

126

31

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	63
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	7
10<20	0	0	0	1	2	12
6<10	0	0	0	0	1	4
3<6	0	0	0	+	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

220

32

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	69
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	3
20<35	0	0	0	+	0	8
10<20	0	0	0	0	1	8
6<10	0	0	0	0	2	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

286

33

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	27
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	1
20<35	0	0	0	0	3	13
10<20	0	0	0	1	5	17
6<10	0	0	1	5	2	13
3<6	0	0	0	1	2	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	3	0	0

88

37

INSUFFICIENT DATA

38

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	14	22
50<80	0	0	0	0	3	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	5	27
10<20	0	0	0	0	5	5
6<10	0	0	0	3	0	3
3<6	0	0	0	0	3	3
1.5<3	0	0	0	0	0	3
0<1.5	0	0	0	0	0	0

37

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

MAY

3

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	54
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	9
10<20	+	+	+	+	3	13
6<10	0	0	+	+	3	6
3<6	0	0	+	+	+	+
1.5<3	0	0	0	+	0	+
0<1.5	+	0	+	+	+	0

1073

4

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	51
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	0
20<35	0	0	0	0	1	15
10<20	0	0	0	0	3	10
6<10	0	0	0	1	7	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

100

5

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	+	0	2	69
50<80	0	+	0	+	0	1
35<50	0	0	0	+	+	3
20<35	0	0	0	0	1	4
10<20	+	0	+	1	2	5
6<10	0	0	0	1	2	6
3<6	0	+	0	+	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	+

552

6

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	1	84
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	1	0	1
10<20	0	0	0	0	1	7
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

97

7

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	75
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	1	5
10<20	0	0	0	+	1	9
6<10	0	0	0	+	1	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1214

8

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	51
50<80	0	0	0	0	+	3
35<50	0	0	0	0	+	4
20<35	0	0	0	0	1	13
10<20	0	0	0	+	1	20
6<10	0	0	0	+	+	5
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	0	0

1078

9

12

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	79
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	2	0
10<20	0	0	0	0	2	5
6<10	0	0	0	2	0	4
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	2	0	0

57

13

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	73
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	7	0	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

14

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	74
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	4
10<20	0	0	0	0	1	8
6<10	0	0	0	0	0	6
3<6	0	0	0	0	1	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

186

15

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	40
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	6
20<35	0	0	0	0	+	15
10<20	0	0	0	0	1	25
6<10	0	0	0	+	+	8
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1309

16

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	53
50<80	0	0	0	0	1	2
35<50	0	0	0	0	1	3
20<35	0	0	0	0	4	15
10<20	0	0	0	0	2	13
6<10	0	0	0	0	1	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

196

17

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	2	0	0	1	31
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	7
10<20	0	0	0	0	0	36
6<10	0	0	0	0	2	15
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

121

18

21

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	55
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	6
10<20	0	0	0	0	3	14
6<10	0	0	1	0	6	7
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

71

22

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	59
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	+	+	21
6<10	0	0	0	0	1	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

205

23

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	0	1	45
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	+	13
10<20	0	0	0	0	+	26
6<10	0	0	0	0	+	6
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1374

24

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	+	+	+	2	67
50<80	0	0	0	0	+	1
35<50	0	+	0	0	+	3
20<35	0	0	0	0	1	6
10<20	0	0	0	0	1	12
6<10	+	+	0	+	1	5
3<6	0	0	+	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	+	+	+	+	0	0

1987

25

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	24
10<20	0	0	0	0	0	8
6<10	0	0	0	0	8	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

25

26

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	58
50<80	0	0	0	0	0	2
35<50	0	0	0	0	1	2
20<35	0	0	0	2	3	5
10<20	0	0	0	1	5	10
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	0	0

191

27

30

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	63
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	7
10<20	0	0	0	1	2	12
6<10	0	0	0	0	1	4
3<6	0	0	0	+	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

220

31

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	69
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	3
20<35	0	0	0	+	0	8
10<20	0	0	0	0	1	8
6<10	0	0	0	0	2	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

286

32

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	27
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	1
20<35	0	0	0	0	3	13
10<20	0	0	0	1	5	17
6<10	0	0	1	5	2	13
3<6	0	0	0	1	2	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	3	0	0

88

33

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	2	0	0	0	11	32
50<80	0	0	0	0	0	2
35<50	0	0	0	2	6	8
20<35	0	0	0	2	0	8
10<20	0	0	0	2	0	9
6<10	0	0	0	0	8	4
3<6	0	0	0	0	0	4
1.5<3	0	0	0	2	0	0
0<1.5	0	0	0	0	0	0

53

34

LOW CLOUD CEILING	VISIBILITY						
	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	2	0	0	0	28	32
50<80	0	0	0	0	1	1
35<50	0	0	0	1	1	1
20<35	0	0	0	0	9	4
10<20	0	0	0	1	9	4
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	1	0
0<1.5	5	0	0	0	0	0

82

35

36

INSUFFICIENT DATA

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45

IT INSUFFICIENT DATA

INSUFFICIENT DATA

INSUFFICIENT DATA

INSUFFICIENT DATA

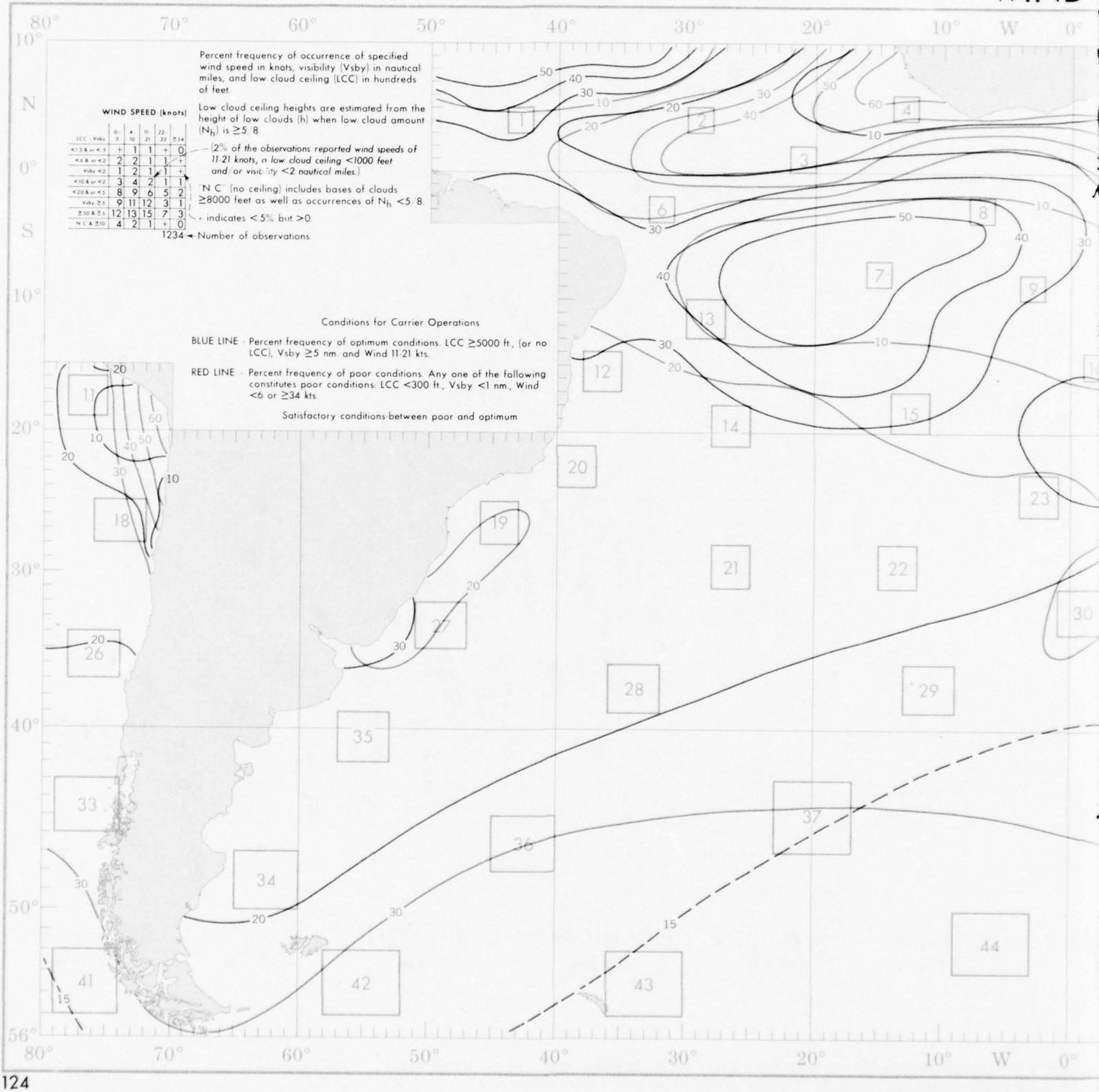
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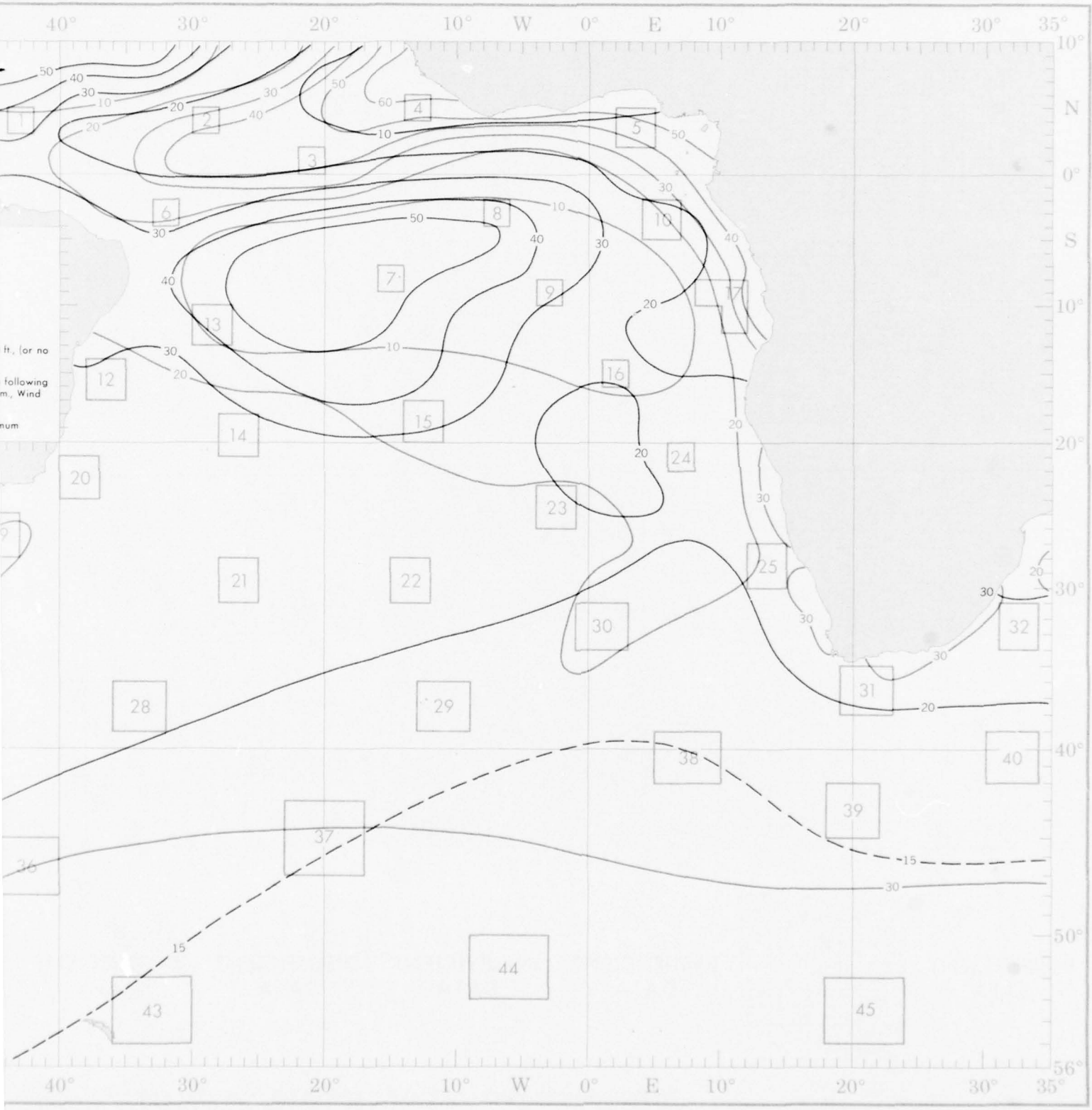
sent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY

WIND-


Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
WIND SPEED (knots)
LCC Vsby
0-3
4-10
11-21
22-33
≥34
<1.5 & or <.5
<6 & or <2
Vsby <2
<10 & or <2
<20 & or <5
Vsby ≥5
≥50 & ≥5
N C & ≥10
+ 1 1 + 0
2 2 1 1 +
1 2 1 1 +
3 4 2 1 1
8 9 6 5 2
9 11 12 3 1
12 13 15 7 3
4 2 1 + 0
1 2 3 4
(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)
N C (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
+ indicates < 5% but >0.
Number of observations.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions. LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions between poor and optimum
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 6 7 8 9 10 11 12 13 14 15 18 19 20 21 22 23 26 27 28 29 30 33 34 35 36 37 41 42 43 44
50 40 30 20 10 60 15

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	2	3	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	7	9	0	0
<20 & OR <5	1	12	17	1	0
VSBY ≥5	2	37	56	2	0
≠50 & ≥5	1	22	33	1	0
NC & ≥10	1	22	31	1	0

374

2

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	2	9	3	+	0
<20 & OR <5	5	22	8	+	0
VSBY ≥5	16	56	24	+	0
≠50 & ≥5	11	31	13	0	0
NC & ≥10	9	28	11	0	0

314

3

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	1	0	0
<20 & OR <5	4	13	8	0	0
VSBY ≥5	19	52	29	0	0
≠50 & ≥5	13	34	21	0	0
NC & ≥10	13	32	21	0	0

90

4

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	7	2	0	0
<20 & OR <5	6	17	5	0	0
VSBY ≥5	25	60	13	+	0
≠50 & ≥5	17	36	6	+	0
NC & ≥10	15	33	6	+	0

1040

5

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	6	0	0
<20 & OR <5	0	20	7	0	0
VSBY ≥5	12	62	24	0	0
≠50 & ≥5	10	34	11	0	0
NC & ≥10	9	32	9	0	0

98

6

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	1	0	0
<10 & OR <2	2	6	4	0	0
<20 & OR <5	2	10	7	0	0
VSBY ≥5	8	55	34	1	0
≠50 & ≥5	5	42	25	1	0
NC & ≥10	5	40	24	+	0

546

10

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	4	0	0
<20 & OR <5	0	12	10	1	0
VSBY ≥5	5	56	37	1	0
≠50 & ≥5	4	41	24	1	0
NC & ≥10	4	40	24	0	0

156

11

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	1	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	4	13	10	1	0
<20 & OR <5	5	30	32	1	0
VSBY ≥5	6	44	45	4	1
≠50 & ≥5	1	11	6	1	1
NC & ≥10	1	10	6	1	0

145

12

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	3	3	1	0
<20 & OR <5	1	7	8	1	0
VSBY ≥5	8	50	37	3	0
≠50 & ≥5	7	42	26	2	0
NC & ≥10	7	40	25	1	0

1351

13

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	7	2	0
<20 & OR <5	0	2	11	4	0
VSBY ≥5	2	36	54	5	0
≠50 & ≥5	2	30	46	2	0
NC & ≥10	0	30	46	2	0

56

14

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	7	7	0	7	0
VSBY ≥5	20	33	40	0	0
≠50 & ≥5	13	27	40	0	0
NC & ≥10	13	27	33	0	0

15

15

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	3	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	4	1	0
<20 & OR <5	2	8	9	1	0
VSBY ≥5	5	45	46	4	0
≠50 & ≥5	3	35	34	3	0
NC & ≥10	3	33	34	3	0

185

19

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	2	1	1	0
<20 & OR <5	1	5	7	3	0
VSBY ≥5	6	44	40	8	1
≠50 & ≥5	5	36	27	5	1
NC & ≥10	5	33	25	5	+

437

20

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	1	1	3	1	0
<20 & OR <5	1	3	7	2	0
VSBY ≥5	5	47	39	4	0
≠50 & ≥5	4	42	29	2	0
NC & ≥10	4	39	26	1	0

201

21

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	4	0	0
<20 & OR <5	0	0	20	0	0
VSBY ≥5	4	16	68	8	0
≠50 & ≥5	4	16	40	4	0
NC & ≥10	4	16	40	0	0

25

22

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	3	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	1	10	6	0
<20 & OR <5	1	11	14	7	0
VSBY ≥5	13	39	38	8	0
≠50 & ≥5	11	24	21	3	0
NC & ≥10	10	23	20	3	0

71

23

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	4	+	0
<20 & OR <5	2	15	15	+	0
VSBY ≥5	8	51	37	3	0
≠50 & ≥5	5	35	18	2	0
NC & ≥10	5	35	17	2	0

204

24

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	0	+	0
<10 & OR <2	+	2	4	1	0
<20 & OR <5	1	9	20	4	0
VSBY ≥5	5	34	52	9	+
≠50 & ≥5	3	21	22	2	+
NC & ≥10	3	19	21	2	0

1365

28

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	6	0
<20 & OR <5	11	6	0	6	0
VSBY ≥5	11	22	56	11	0
≠50 & ≥5	0	11	44	6	0
NC & ≥10	0	11	33	6	0

18

29

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	1
<6 & OR <2	0	1	2	2	1
VSBY <2	0	1	0	0	1
<10 & OR <2	0	5	6	4	2
<20 & OR <5	2	14	14	7	2
VSBY ≥5	13	25	33	19	2
≠50 & ≥5	10	12	16	10	1
NC & ≥10	10	12	15	10	1

162

30

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	1	1
<6 & OR <2	0	0	0	1	1
VSBY <2	0	0	0	1	1
<10 & OR <2	1	7	8	2	1
<20 & OR <5	1	12	15	6	2
VSBY ≥5	6	41	39	11	1
≠50 & ≥5	5	23	20	5	0
NC & ≥10	5	23	17	4	0

123

31

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	3	0
<20 & OR <5	1	6	8	5	+
VSBY ≥5	12	32	37	15	2
≠50 & ≥5	10	25	24	9	1
NC & ≥10	9	24	20	8	1

217

32

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	1	+
<20 & OR <5	+	5	7	4	1
VSBY ≥5	5	40	39	13	3
≠50 & ≥5	4	31	27	9	1
NC & ≥10	4	30	25	8	1

283

33

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	2
<6 & OR <2	0	1	2	1	3
VSBY <2	0	0	1	0	0
<10 & OR <2	0	5	11	7	5
<20 & OR <5	0	8	26	11	5
VSBY ≥5	1	17	45	23	2
≠50 & ≥5	1	9	16	6	0
NC & ≥10	1	8	14	5	0

88

37

INSUFFICIENT DATA

38

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	3	3	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	6	6	3	0	0
<20 & OR <5	6	11	6	0	6
VSBY ≥5	22	47	17	3	6
≠50 & ≥5	6	19	11	0	0
NC & ≥10	6	8	8	0	0

36

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

SIBILITY-WIND

MAY

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	7	2	0	0
<20 & OR <5	6	17	5	0	0
VSBY ≥5	25	60	13	+	0
≥50 & ≥5	17	36	6	+	0
NC & ≥10	15	33	6	+	0

1040

4

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	6	0	0
<20 & OR <5	0	20	7	0	0
VSBY ≥5	12	62	24	0	0
≥50 & ≥5	10	34	11	0	0
NC & ≥10	9	32	9	0	0

98

5

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	+	1	0	0
<10 & OR <2	2	6	4	0	0
<20 & OR <5	2	10	7	0	0
VSBY ≥5	8	55	34	1	0
≥50 & ≥5	5	42	25	1	0
NC & ≥10	5	40	24	+	0

546

6

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	0	0
<20 & OR <5	0	3	10	0	0
VSBY ≥5	0	21	75	2	0
≥50 & ≥5	0	18	65	2	0
NC & ≥10	0	18	64	2	0

97

7

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	0	0
<20 & OR <5	0	6	9	+	0
VSBY ≥5	1	41	57	1	0
≥50 & ≥5	1	32	44	+	0
NC & ≥10	1	31	43	+	0

1205

8

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	5	+	0
<20 & OR <5	+	9	19	+	0
VSBY ≥5	+	36	62	2	0
≥50 & ≥5	+	20	33	1	0
NC & ≥10	+	18	31	1	0

1075

9

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	2	0	0
<20 & OR <5	0	2	2	0	0
VSBY ≥5	0	2	5	+	0
≥50 & ≥5	0	2	3	+	0
NC & ≥10	0	2	3	+	0

56

13

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	7	7	0	7	0
VSBY ≥5	20	33	40	0	0
≥50 & ≥5	13	27	40	0	0
NC & ≥10	13	27	33	0	0

15

14

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	3	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	4	1	0
<20 & OR <5	2	8	9	1	0
VSBY ≥5	5	45	46	4	0
≥50 & ≥5	3	35	34	3	0
NC & ≥10	3	33	34	3	0

185

15

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	+	0
<20 & OR <5	1	12	21	2	0
VSBY ≥5	4	41	52	3	0
≥50 & ≥5	2	20	20	1	0
NC & ≥10	2	19	19	1	0

1305

16

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	2	0	0
<20 & OR <5	1	11	7	0	0
VSBY ≥5	9	66	26	0	0
≥50 & ≥5	4	39	15	0	0
NC & ≥10	3	35	14	0	0

195

17

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	2	1	0	0	0
VSBY <2	1	1	0	0	0
<10 & OR <2	3	12	4	0	0
<20 & OR <5	5	30	19	1	0
VSBY ≥5	6	44	41	7	0
≥50 & ≥5	1	10	18	6	0
NC & ≥10	1	10	16	5	0

119

18

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	+	+	0
VSBY <2	+	+	+	+	0
<10 & OR <2	+	3	2	1	+
<20 & OR <5	1	8	9	2	+
VSBY ≥5	9	40	38	11	1
≥50 & ≥5	6	29	26	9	1
NC & ≥10	6	27	25	8	1

1957

22

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	4	+	0
<20 & OR <5	2	15	15	+	0
VSBY ≥5	8	51	37	3	0
≥50 & ≥5	5	35	18	2	0
NC & ≥10	5	35	17	2	0

204

23

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	0	+	0
<10 & OR <2	+	2	4	1	0
<20 & OR <5	1	9	20	4	0
VSBY ≥5	5	34	52	9	+
≥50 & ≥5	3	21	22	2	+
NC & ≥10	3	19	21	2	0

1369

24

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	+	+	0
VSBY <2	+	+	+	+	0
<10 & OR <2	+	3	2	1	+
<20 & OR <5	9	40	38	11	1
VSBY ≥5	4	20	60	12	4
≥50 & ≥5	0	12	40	4	4
NC & ≥10	0	12	40	4	4

25

25

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	2	1	0
<20 & OR <5	0	8	10	5	0
VSBY ≥5	5	37	44	12	0
≥50 & ≥5	5	24	31	6	0
NC & ≥10	5	21	27	4	0

188

26

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	8	0	0
<20 & OR <5	0	0	16	0	0
VSBY ≥5	4	20	60	12	4
≥50 & ≥5	0	12	40	4	4
NC & ≥10	0	12	40	4	4

25

27

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	2	1	0
<20 & OR <5	0	8	10	5	0
VSBY ≥5	5	37	44	12	0
≥50 & ≥5	5	24	31	6	0
NC & ≥10	5	21	27	4	0

188

31

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	3	0
<20 & OR <5	1	6	8	5	+
VSBY ≥5	12	32	37	15	2
≥50 & ≥5	10	25	24	9	1
NC & ≥10	9	24	20	8	1

217

32

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	1	+
<20 & OR <5	+	5	7	4	1
VSBY ≥5	5	40	39	13	3
≥50 & ≥5	4	31	27	9	1
NC & ≥10	4	30	25	8	1

283

33

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	1	0	0	2
<6 & OR <2	0	1	2	1	3
VSBY <2	0	0	1	0	0
<10 & OR <2	0	5	11	7	5
<20 & OR <5	0	8	26	11	5
VSBY ≥5	1	17	45	23	2
≥50 & ≥5	1	9	16	6	0
NC & ≥10	1	8	14	5	0

88

34

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	0	4	4	0	0
VSBY <2	0	2	0	0	0
<10 & OR <2	0	4	10	2	4
<20 & OR <5	0	8	16	6	4
VSBY ≥5	2	20	49	16	4
≥50 & ≥5	2	14	24	8	0
NC & ≥10	2	10	16	6	0

51

35

LCC – VSBY	WIND SPEED (KNOTS) 0–3	4–10	11–21	22–33	≥34
<1.5 & OR <.5	0	4	1	1	0
<6 & OR <2	0	5	1	1	0
VSBY <2	0	4	1	1	0
<10 & OR <2	0	5	1	1	0
<20 & OR <5	0	9	11	1	0
VSBY ≥5	6	33	44	8	1
≥50 & ≥5	5	25	29	5	0
NC & ≥10	4	14	11	4	0

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INSUFFICIENT DATA

INSUFFICIENT DATA

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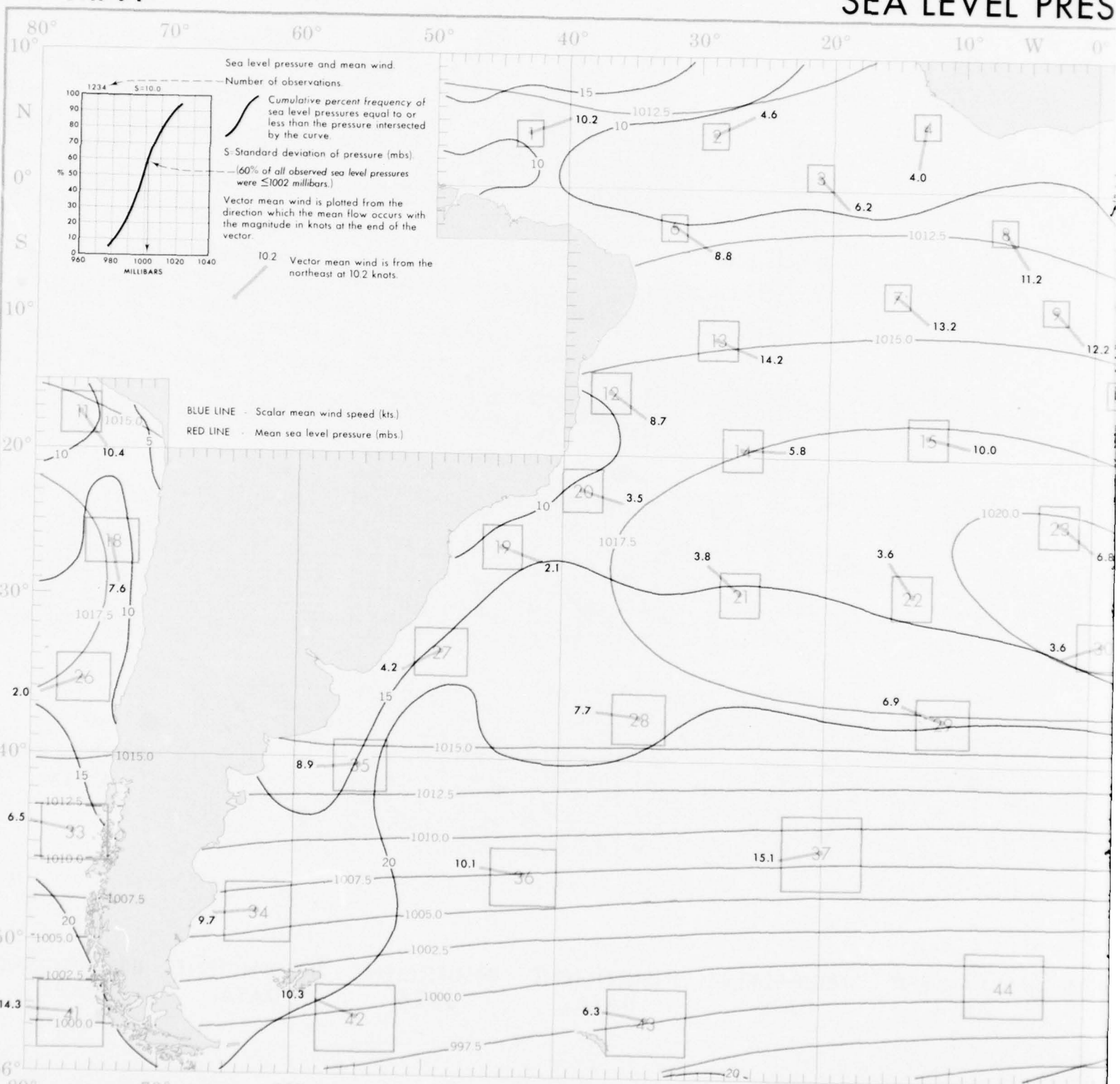
INSUFFICIENT DATA

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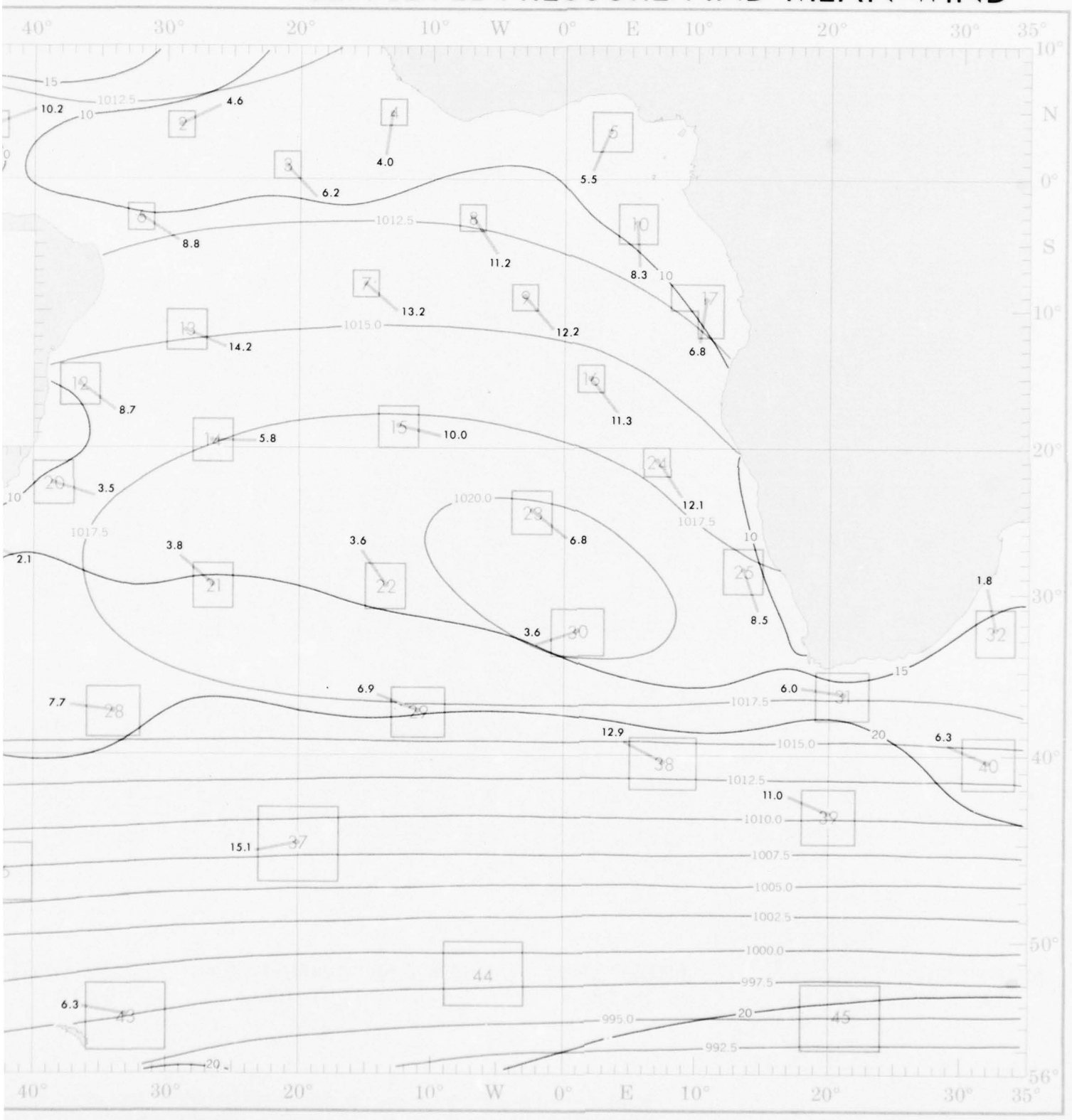
t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY

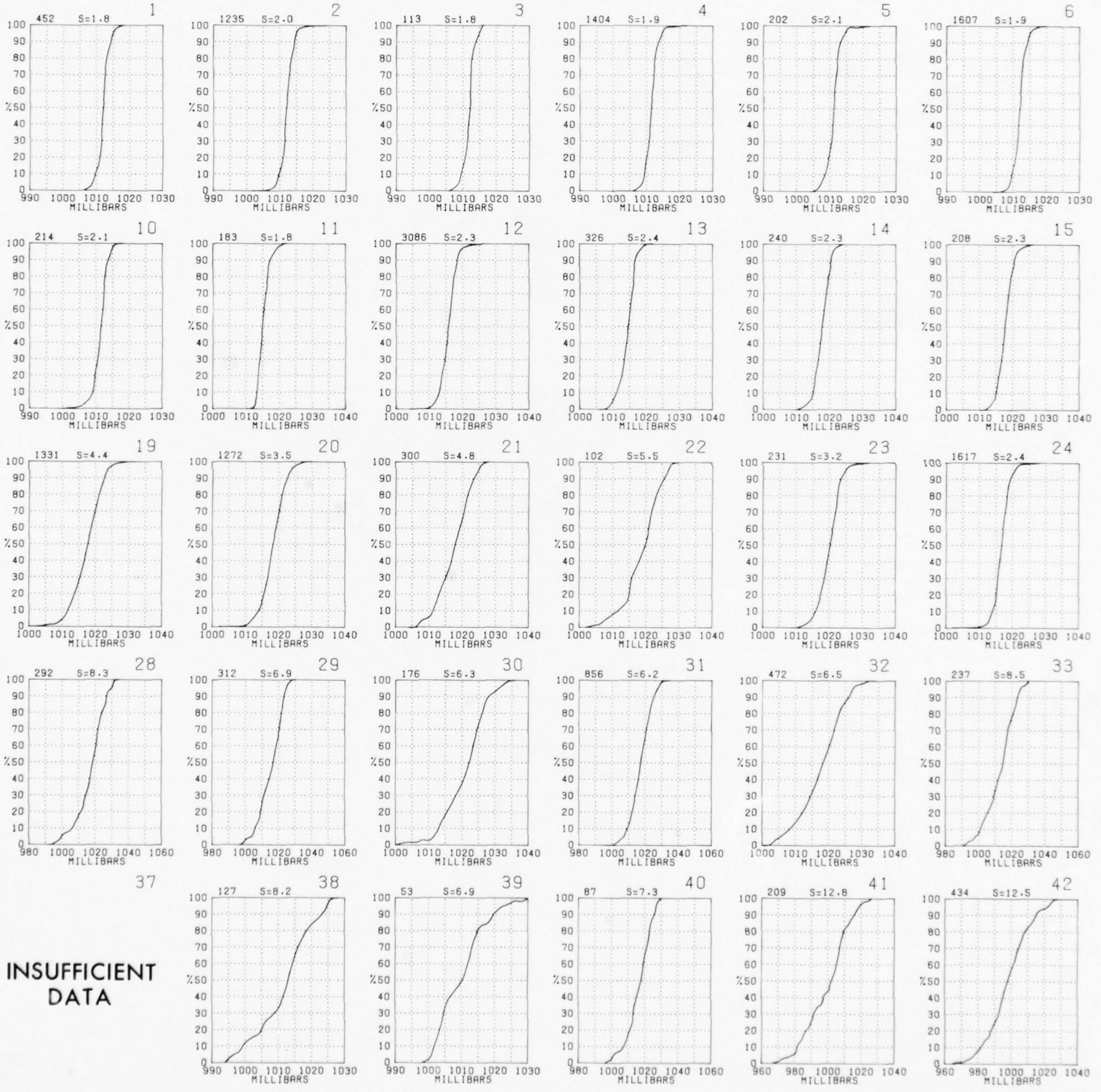
SEA LEVEL PRES



SEA LEVEL PRESSURE AND MEAN WIND



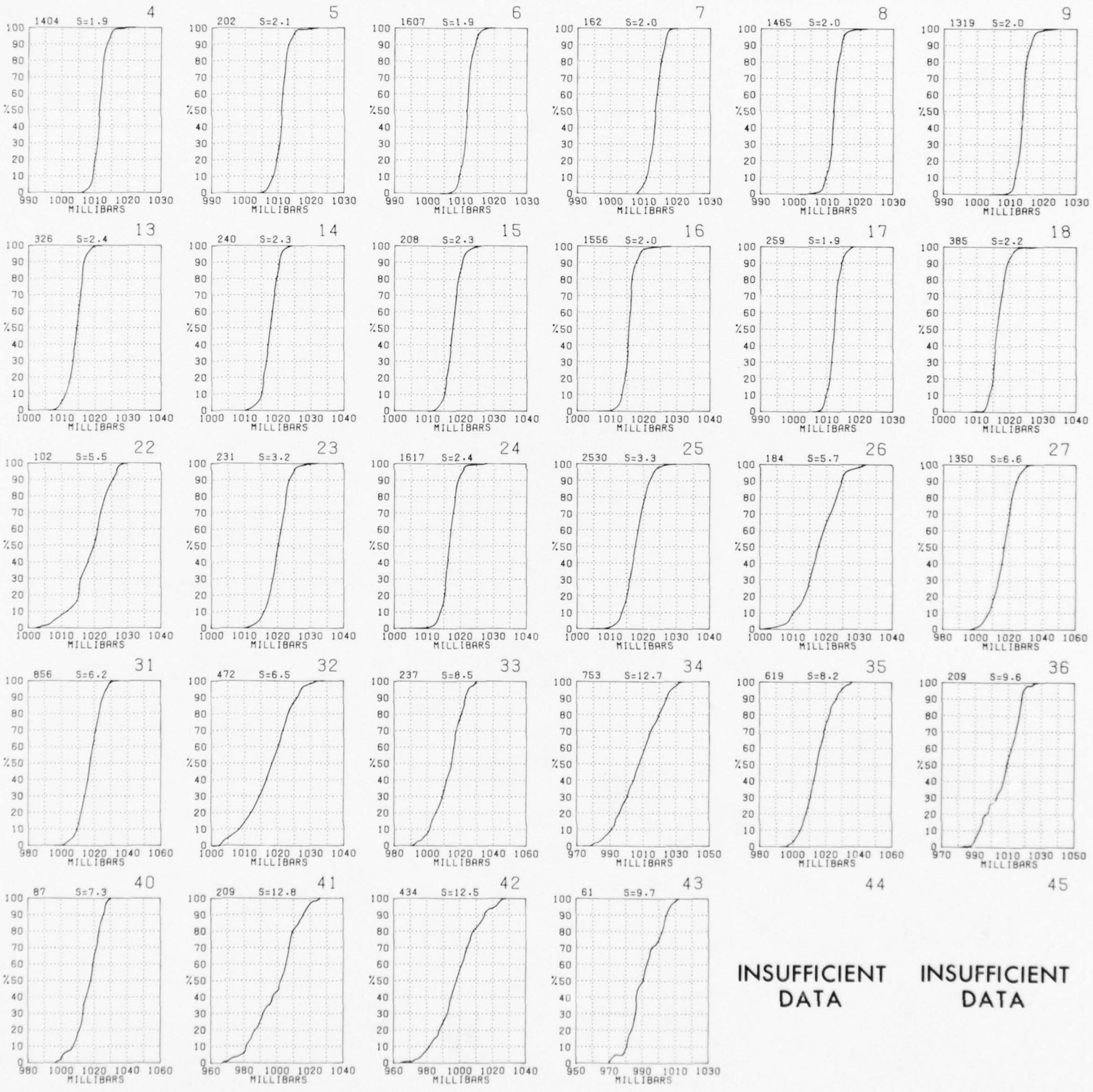
SEA LEVEL PRESSURE



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

MAY



44

INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

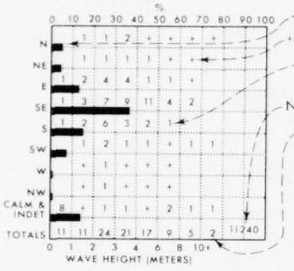
MAY

WAVES (<1

Wave direction and height.

Direction frequency (top scale): Bars represent percent frequency of waves from each direction.

Height frequency (bottom scale): Printed figures represent percent frequency of wave heights observed from each direction.



(5% of all waves were from the N.)

+ indicates < 5% but >0.

(1% of all waves were from the S with heights from 6-7.5 meters.)

Number of observations.

(2% of the waves from all directions had heights ≥10 meters.)

WAVE HEIGHT INTERVAL

Feet	0-2	3-6	7-9	10-12	13-19	20-25	26-32	≥33
Meters	0-.5	1-1.5	2-2.5	3-3.5	4-5.5	6-7.5	8-9.5	≥10

0 1 2 3 4 6 8 10+

Printed scale on bottom of chart

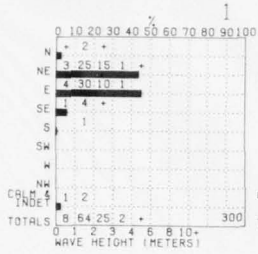
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)

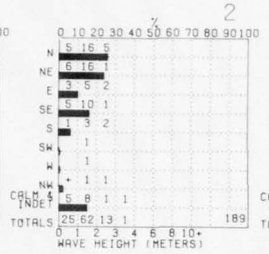
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

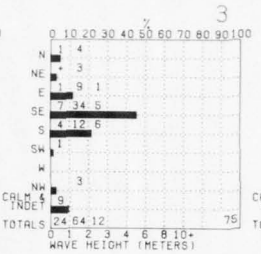
WAVES (<1.5 AND <2.5 METERS)

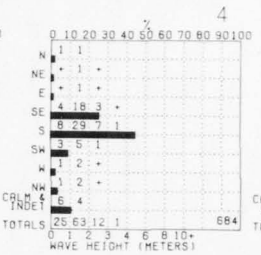


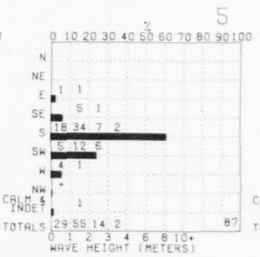
WAVE DIRECTION AND HEIGHT

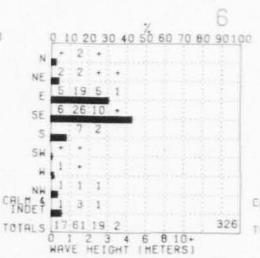


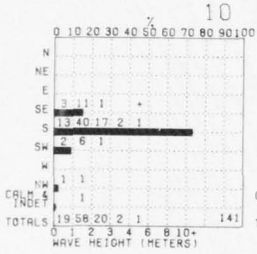


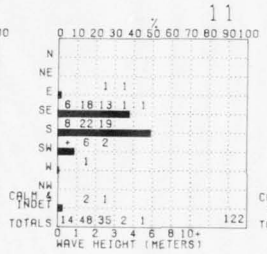


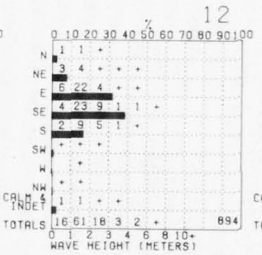


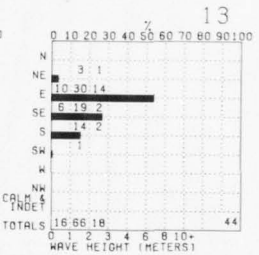






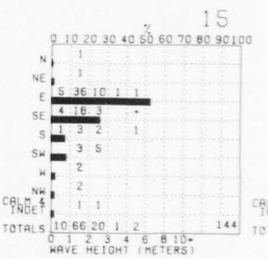


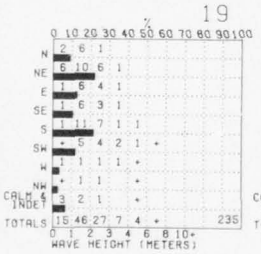


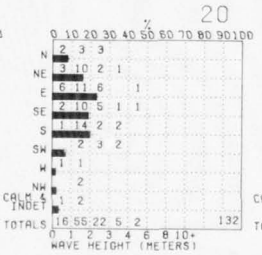


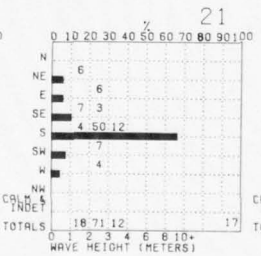
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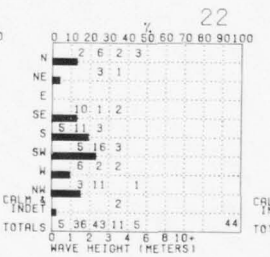
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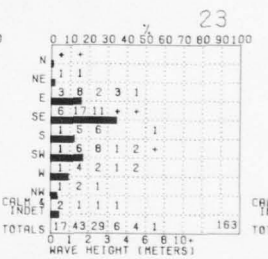


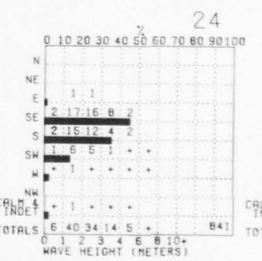






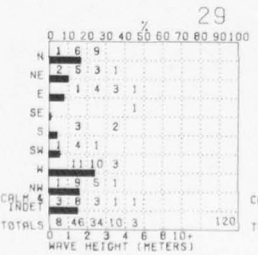


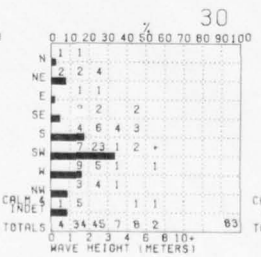


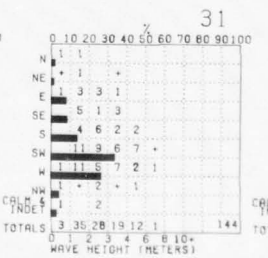


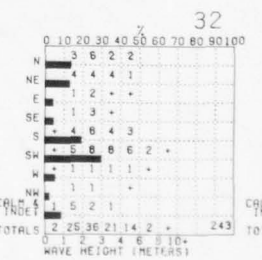
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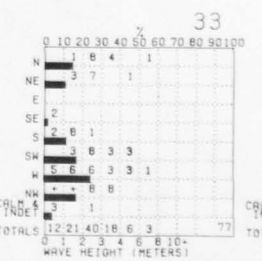
INSUFFICIENT DATA









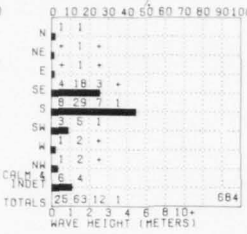


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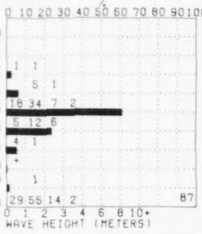
INSUFFICIENT DATA | INSUFFICIENT DATA | INSUFFICIENT DATA | INSUFFICIENT DATA | INSUFFICIENT DATA | INSUFFICIENT DATA | IN

Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

4



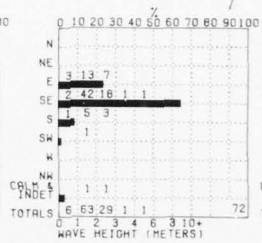
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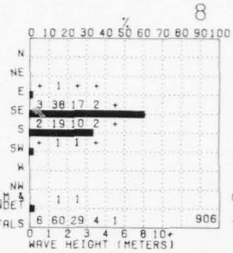
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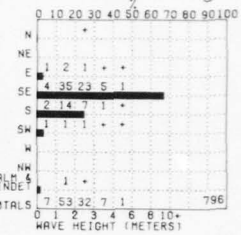
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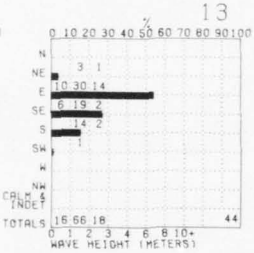
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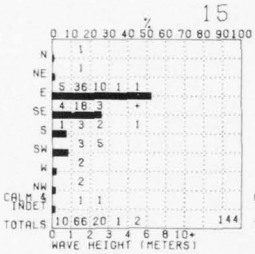
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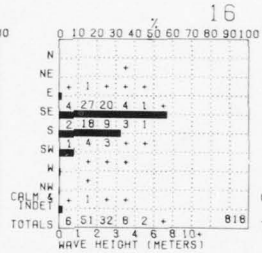
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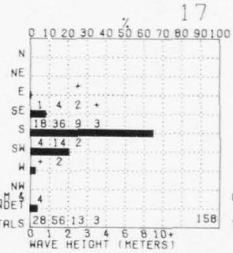
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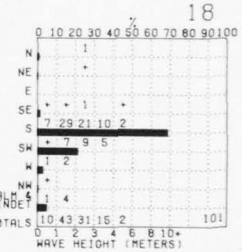
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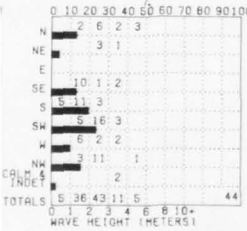
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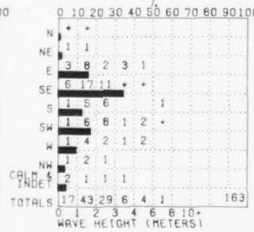
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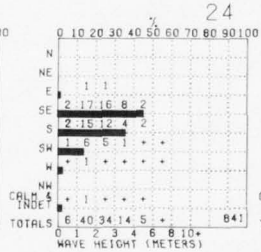
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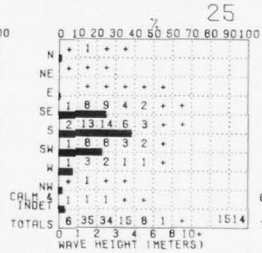
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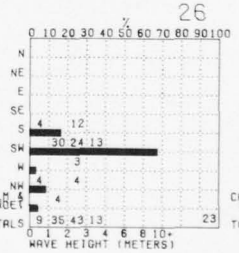
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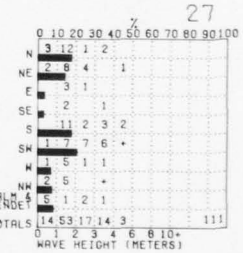
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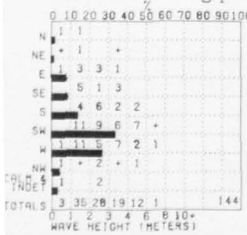
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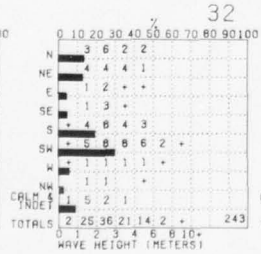
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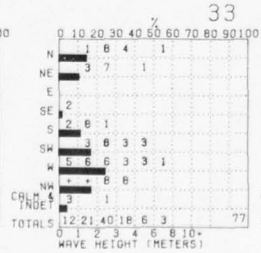
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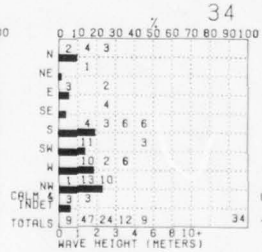
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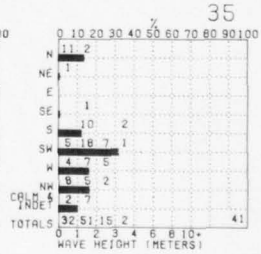
33



34



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36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

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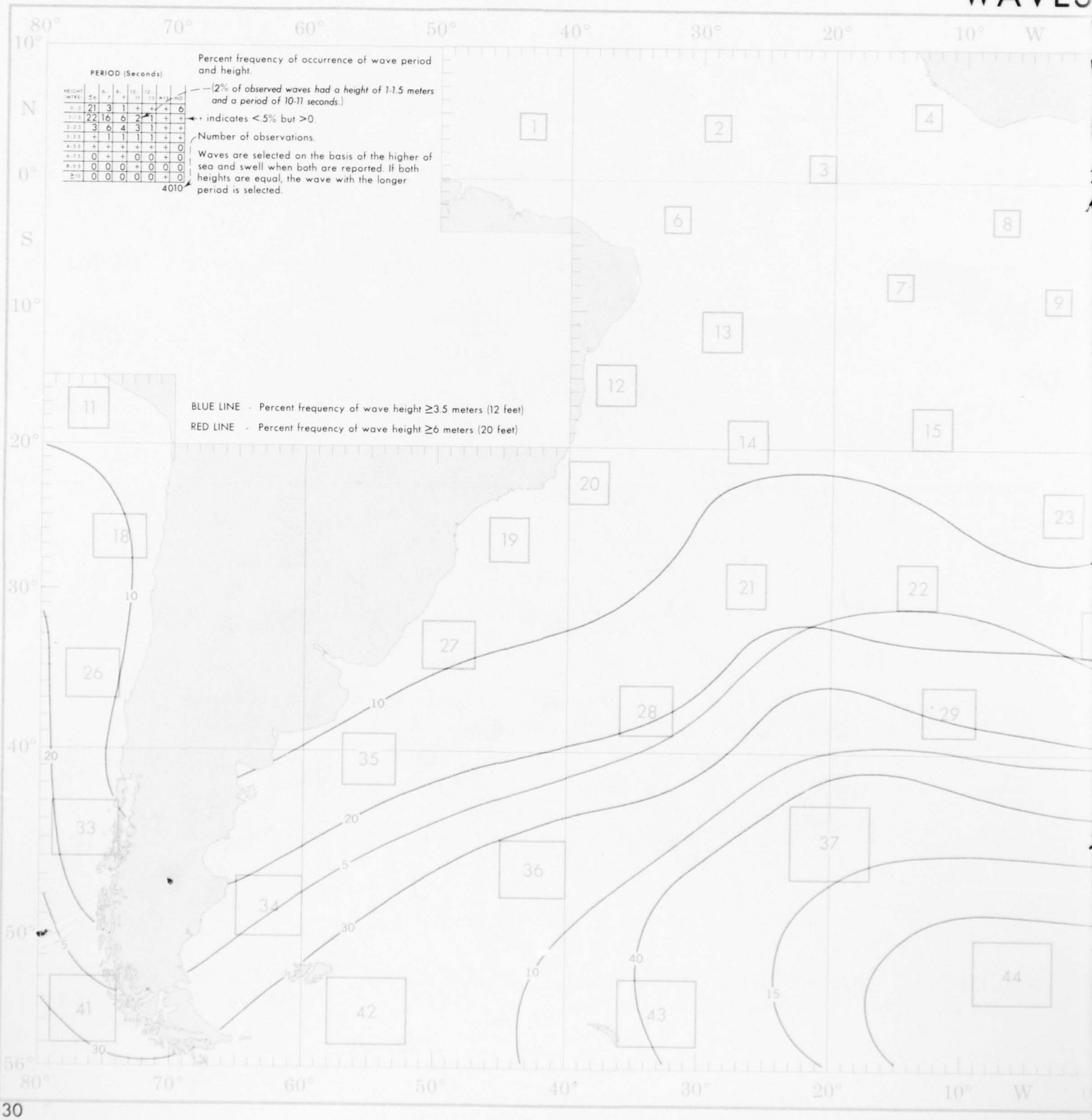
45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

MAY

WAVES


PERIOD (Seconds)
HEIGHT (METERS)
≤6
6-7
8-9
10-11
12-13
>13
NO
0-1.5
21
3
1
+
+
+
6
1.5-3
22
16
6
2
1
+
+
2-2.5
3
6
4
3
1
+
+
3-3.5
+
1
1
1
1
+
+
4-5.5
+
+
+
+
+
+
0
6-7.5
0
+
+
0
0
+
0
8-9.5
0
0
0
+
0
0
0
≥10
0
0
0
0
0
+
0
4010
Percent frequency of occurrence of wave period and height.
(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)
+ indicates < 5% but >0.
Number of observations.
Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.
BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)
RED LINE - Percent frequency of wave height ≥6 meters (20 feet)
80°
70°
60°
50°
40°
30°
20°
10°
W
10° N
0°
10° S
20°
30°
40°
50°
56°
1
2
3
4
6
7
8
9
11
12
13
14
15
18
19
20
21
22
23
26
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41
42
43
44
10
20
30
40
5
15

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	+	0	0	0	2
1-1.5	27	24	7	+	2	0	3
2-2.5	4	10	9	2	0	0	+
3-3.5	0	1	0	1	0	0	0
4-5.5	0	0	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

305

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	2	1	1	0	0	8
1-1.5	17	20	4	1	1	0	14
2-2.5	1	5	3	1	1	0	1
3-3.5	0	0	0	0	0	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

201

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	0	0	1	0	0	10
1-1.5	26	27	5	1	1	0	1
2-2.5	1	5	1	0	3	0	1
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

77

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	1	1	0	0	10
1-1.5	22	20	5	3	3	+	8
2-2.5	2	4	2	1	1	+	1
3-3.5	+	+	+	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

701

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	4	1	1	0	0	5
1-1.5	16	23	3	1	1	0	8
2-2.5	2	7	3	1	0	0	0
3-3.5	1	0	0	0	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

91

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	0	0	0	0	5
1-1.5	20	21	4	2	1	0	10
2-2.5	3	10	3	1	1	+	1
3-3.5	1	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

338

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	1	0	0	0	7
1-1.5	23	15	2	5	5	0	5
2-2.5	2	5	7	2	3	0	1
3-3.5	0	1	1	0	0	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	0	0	0	0	6
1-1.5	15	15	6	2	1	0	8
2-2.5	6	4	12	8	1	1	2
3-3.5	0	0	1	1	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

129

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	3	1	+	0	0	3
1-1.5	23	24	5	1	1	0	5
2-2.5	3	7	4	1	+	+	1
3-3.5	+	1	1	0	+	0	+
4-5.5	+	1	+	+	0	+	0
6-7.5	0	0	0	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

918

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	0	0	0	0	0	0
1-1.5	23	16	14	9	2	0	2
2-2.5	5	9	5	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

44

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	0	0	0	0	0
1-1.5	31	18	6	3	4	0	3
2-2.5	1	6	6	3	2	1	1
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	0	0	0	0	5
1-1.5	14	21	5	2	1	0	4
2-2.5	3	8	10	1	1	0	4
3-3.5	1	1	3	+	1	0	1
4-5.5	0	3	+	0	0	+	+
6-7.5	0	0	0	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

237

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	0	0	0	0	3
1-1.5	23	19	5	2	0	0	8
2-2.5	4	8	6	2	0	1	2
3-3.5	2	1	2	0	1	0	0
4-5.5	0	0	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

133

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	12	6	0	0	0	0	0
2-2.5	18	12	18	6	18	0	0
3-3.5	0	0	0	12	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	0
1-1.5	9	16	9	0	0	0	2
2-2.5	2	14	18	9	0	0	0
3-3.5	0	2	2	2	2	0	2
4-5.5	0	0	5	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

44

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	2	0	0	2
1-1.5	16	13	5	4	0	0	4
2-2.5	4	8	10	2	2	2	1
3-3.5	1	0	4	1	0	0	1
4-5.5	0	1	1	0	1	2	0
6-7.5	0	0	0	0	1	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

167

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-12	12-13	>13	IND
0-.5	4	+	1	0	0	0	1
1-1.5	11	13	7	3	2	1	4
2-2.5	5	11	8	4	2	2	2
3-3.5	1	4	4	3	1	+	1
4-5.5	+	1	2	1	+	+	+
6-7.5	0	0	+	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

845

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	1	1	0	0	3
1-1.5	20	9	3	2	0	2	9
2-2.5	16	15	0	0	1	0	2
3-3.5	1	5	2	2	0	0	0
4-5.5	1	0	1	0	0	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

122

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	1
1-1.5	10	12	6	0	1	0	5
2-2.5	0	19	14	8	2	0	0
3-3.5	0	1	2	1	2	0	0
4-5.5	0	0	2	5	0	0	1
6-7.5	0	0	1	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

83

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	0	0	0	0	1
1-1.5	9	13	8	4	0	0	1
2-2.5	5	8	7	3	1	0	5
3-3.5	1	3	4	6	1	1	4
4-5.5	0	3	1	5	1	1	0
6-7.5	0	0	0	1	1	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	1
1-1.5	9	5	5	1	+	0	5
2-2.5	6	9	10	5	2	0	4
3-3.5	3	7	5	2	2	+	2
4-5.5	2	+	4	3	2	+	1
6-7.5	0	0	1	0	+	+	+
8-9.5	0	+	0	0	0	0	0
≥10	0	0	0	0	0	0	0

244

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	4	0	0	4
1-1.5	9	5	1	1	3	0	1
2-2.5	13	5	6	8	1	1	5
3-3.5	0	4	5	1	6	1	0
4-5.5	0	1	0	1	0	3	1
6-7.5	0	0	0	3	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

79

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

IGHT

MAY

3

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
>13							
IND							
0-.5						0	10
1-1.5						0	1
2-2.5						0	1
3-3.5						0	0
4-5.5						0	0
6-7.5						0	0
8-9.5						0	0
≥10						0	0

77

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	1	1	0	0	10
1-1.5	22	20	5	3	3	+	8
2-2.5	2	4	2	1	1	+	1
3-3.5	+	+	+	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

701

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	4	1	1	0	0	5
1-1.5	16	23	3	1	1	0	8
2-2.5	2	7	3	1	0	0	0
3-3.5	1	0	0	0	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

91

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	0	0	0	0	5
1-1.5	20	21	4	2	1	0	10
2-2.5	3	10	3	1	1	+	1
3-3.5	1	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

338

7

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	0
1-1.5	26	29	3	1	1	0	1
2-2.5	8	4	10	4	0	0	3
3-3.5	0	0	1	0	0	0	0
4-5.5	1	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

72

8

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	+	0	0	0	1
1-1.5	21	21	8	2	2	1	6
2-2.5	6	10	6	2	1	+	3
3-3.5	+	2	1	+	+	+	+
4-5.5	0	+	+	+	0	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

910

9

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	+	0	0	0	1
1-1.5	19	16	7	3	2	1	6
2-2.5	7	12	7	2	1	1	2
3-3.5	1	3	2	1	0	0	1
4-5.5	0	+	+	1	+	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

800

12

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
>13							
IND							
0-.5						0	3
1-1.5						0	5
2-2.5						+	1
3-3.5						0	+
4-5.5						+	0
6-7.5						+	0
8-9.5						0	0
≥10						0	0

918

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	0	0	0	0	0	0
1-1.5	23	16	14	9	2	0	2
2-2.5	5	9	5	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

44

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	0	0	0	0	0
1-1.5	31	18	6	3	4	0	3
2-2.5	1	6	6	3	2	1	1
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

16

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	+	0	0	0	1
1-1.5	15	16	9	2	2	+	6
2-2.5	7	9	8	3	2	1	2
3-3.5	1	2	3	2	+	+	+
4-5.5	0	1	1	+	0	+	0
6-7.5	0	0	0	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

823

17

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	6	1	1	0	0	6
1-1.5	16	23	12	3	0	1	1
2-2.5	1	4	4	4	0	1	0
3-3.5	0	0	2	1	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

160

18

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	5
1-1.5	9	12	12	0	1	1	8
2-2.5	2	11	5	6	4	0	3
3-3.5	0	5	1	9	0	0	0
4-5.5	0	0	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

103

21

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
>13							
IND							
0-.5						0	0
1-1.5						0	0
2-2.5						0	0
3-3.5						0	0
4-5.5						0	0
6-7.5						0	0
8-9.5						0	0
≥10						0	0

17

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	0
1-1.5	9	16	9	0	0	0	2
2-2.5	2	14	18	9	0	0	0
3-3.5	0	2	2	2	2	0	2
4-5.5	0	0	5	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

44

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	2	0	0	2
1-1.5	16	13	5	4	0	0	4
2-2.5	4	8	10	2	2	2	1
3-3.5	1	0	4	1	0	0	1
4-5.5	0	1	1	0	1	2	0
6-7.5	0	0	0	0	1	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

167

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	1	0	0	0	1
1-1.5	11	13	7	3	2	1	4
2-2.5	5	11	8	4	2	2	2
3-3.5	1	4	4	3	1	+	1
4-5.5	+	1	2	1	+	+	+
6-7.5	0	0	+	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

845

25

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	+	0	0	2
1-1.5	9	12	7	2	1	1	4
2-2.5	5	9	9	5	2	1	3
3-3.5	1	5	5	3	2	+	1
4-5.5	1	1	3	2	1	+	+
6-7.5	0	+	+	+	+	+	+
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	0	0	0	0

1530

26

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	0
1-1.5	0	9	9	13	0	0	4
2-2.5	0	22	0	13	9	0	0
3-3.5	0	0	0	13	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

23

27

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	5
1-1.5	21	21	2	1	0	0	8
2-2.5	2	10	3	1	0	0	2
3-3.5	2	3	4	3	1	0	2
4-5.5	0	0	1	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

112

30

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
>13							
IND							
0-.5						0	1
1-1.5						0	5
2-2.5						0	0
3-3.5						0	0
4-5.5						0	1
6-7.5						0	0
8-9.5						0	0
≥10						0	0

83

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	0	0	0	0	1
1-1.5	9	13	8	4	0	0	1
2-2.5	5	8	7	3	1	0	5
3-3.5	1	3	4	6	1	1	4
4-5.5	0	3	1	5	1	1	0
6-7.5	0	0	0	1	1	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	1
1-1.5	9	5	5	1	+	0	5
2-2.5	6	9	10	5	2	0	4
3-3.5	3	7	5	2	2	+	2
4-5.5	2	+	4	3	2	+	1
6-7.5	0	0	1	0	+	+	+
8-9.5	0	+	0	0	0	0	0
≥10	0	0	0	0	0	0	0

244

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	4	0	0	4
1-1.5	9	5	1	1	3	0	1
2-2.5	13	5	6	8	1	1	5
3-3.5	0	4	5	1	6	1	0
4-5.5	0	1	0	1	0	3	1
6-7.5	0	0	0	3	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

79

34

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	3	0	0	0	0	6
1-1.5	24	12	3	0	0	0	9
2-2.5	3	18	0	3	0	0	0
3-3.5	0	6	3	3	0	0	0
4-5.5	3	0	3	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

34

35

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	12	0	0	0	0	2
1-1.5	12	14	2	5	2	2	12
2-2.5	0	2	5	0	0	7	0
3-3.5	2	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

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INSUFFICIENT DATA

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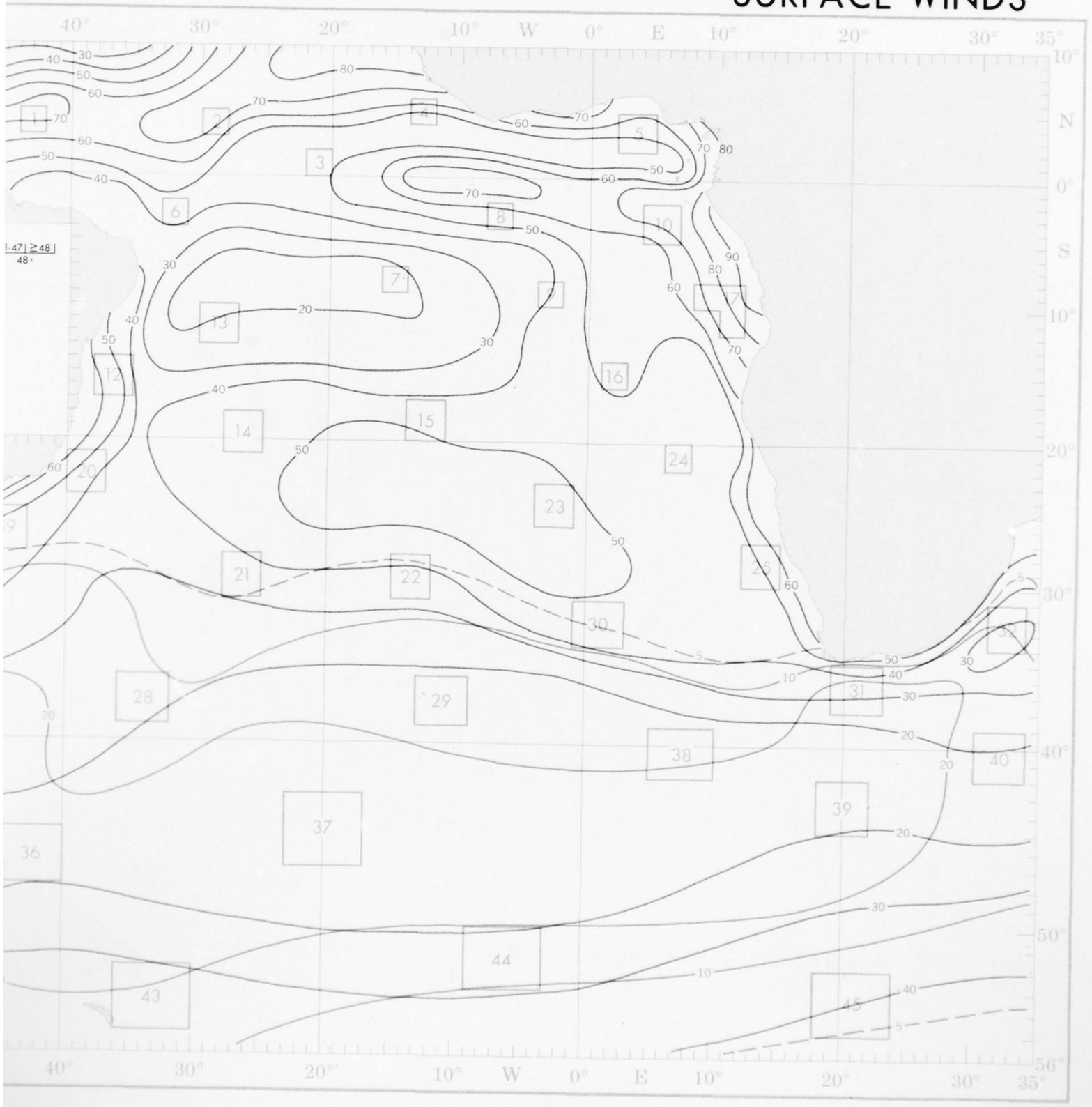
esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE

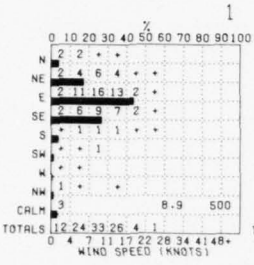
Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart

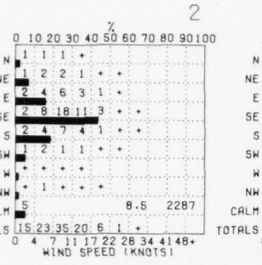

BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

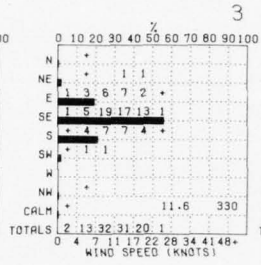
SURFACE WINDS

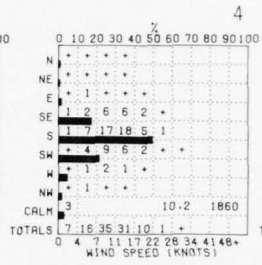


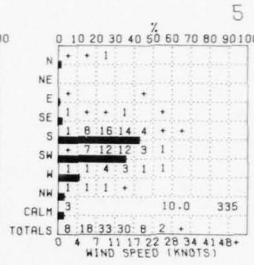
WIND DIRECTION AND SPEED

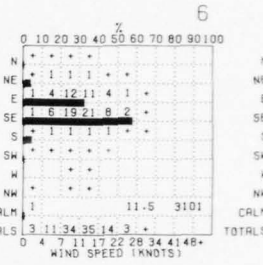


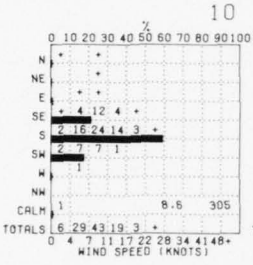


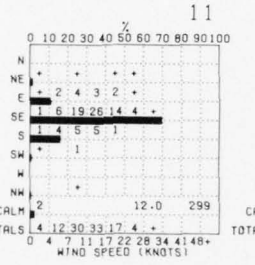


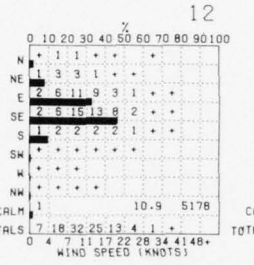


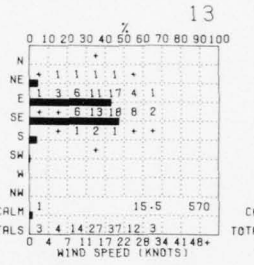


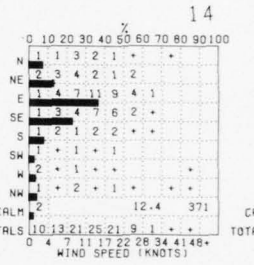


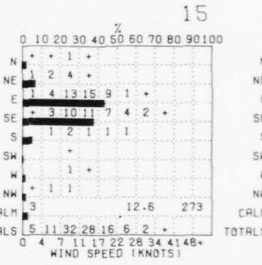


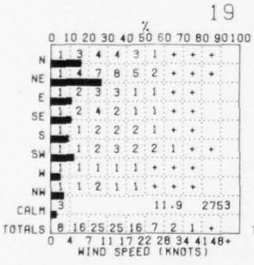


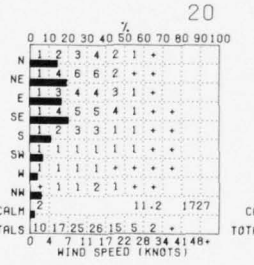


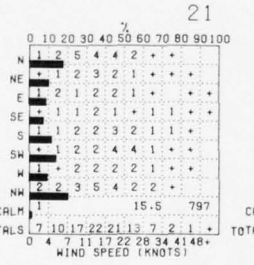


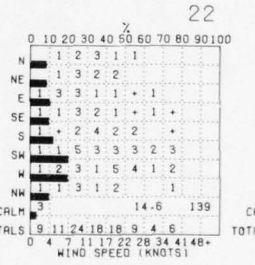


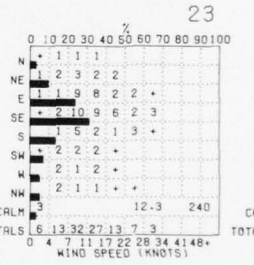


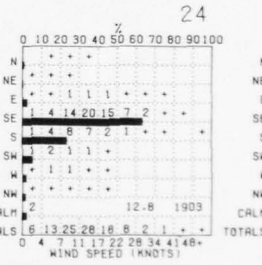


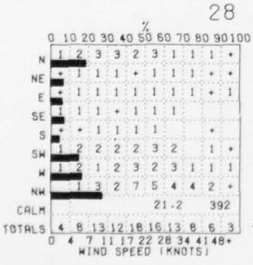


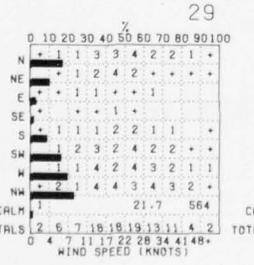


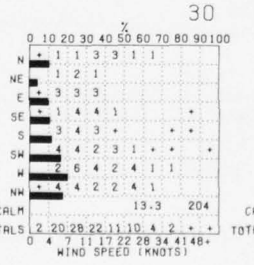


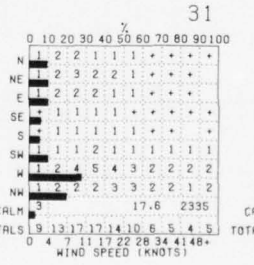


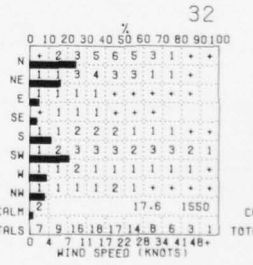


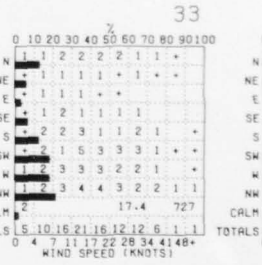




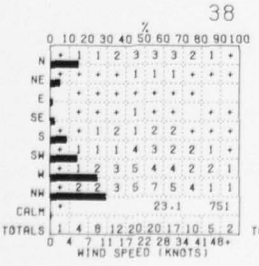


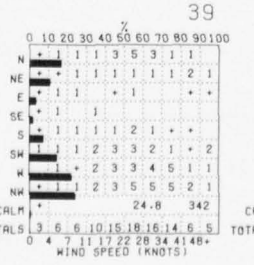


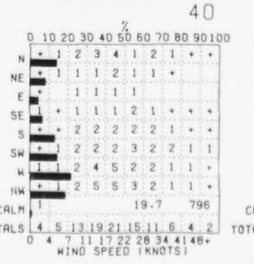


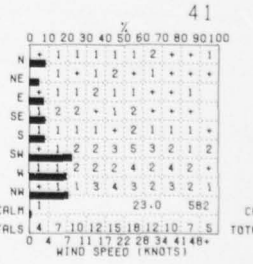


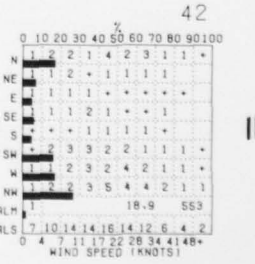
INSUFFICIENT DATA





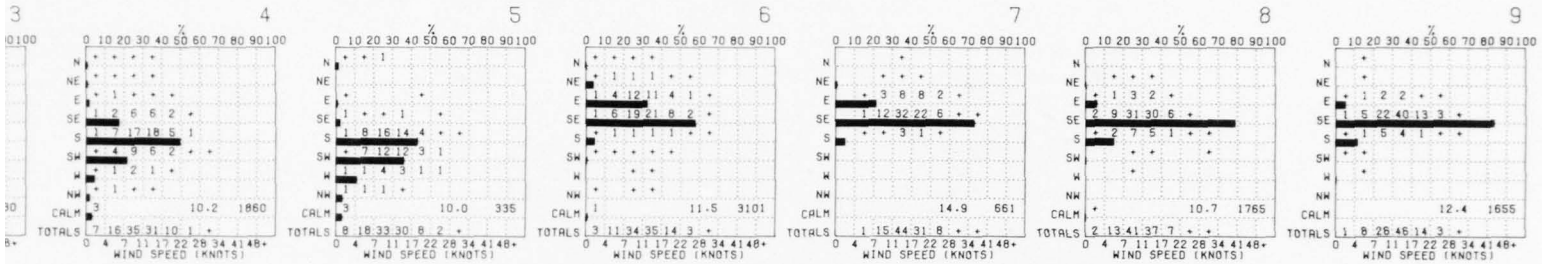


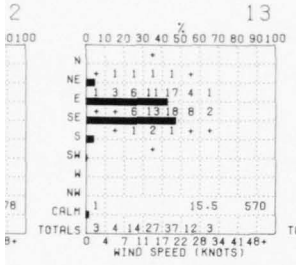


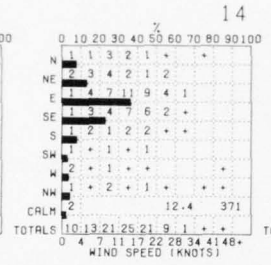


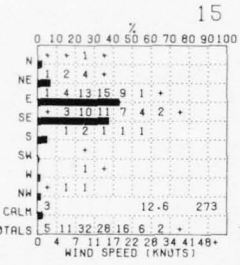
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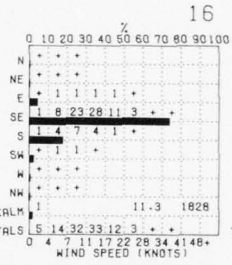
Graphs represent the objective compilation of available data for specified areas without regard to suspe
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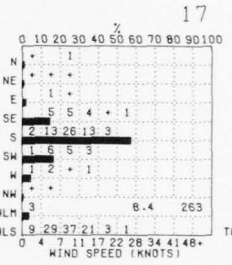


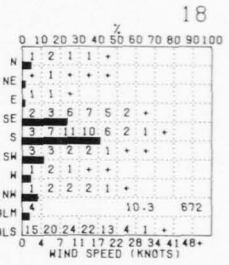


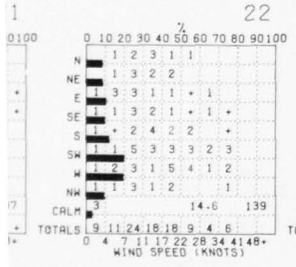


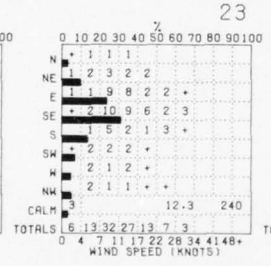


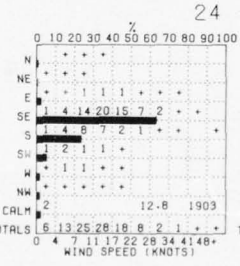


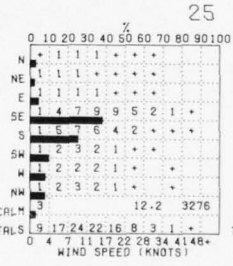


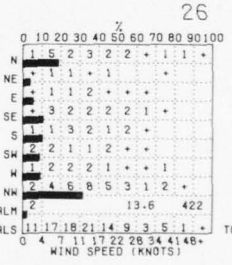


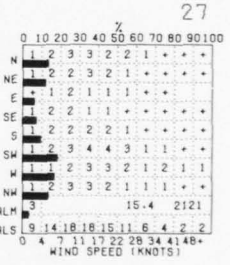


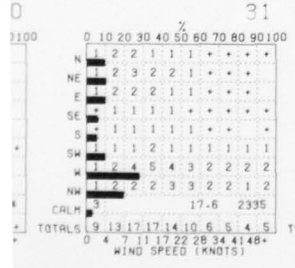


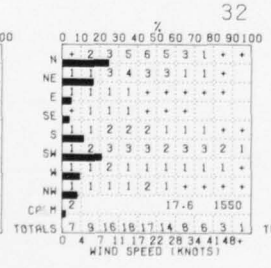


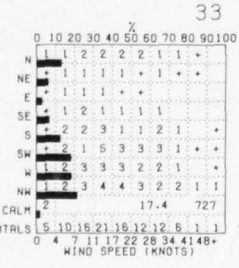


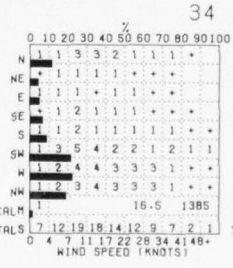


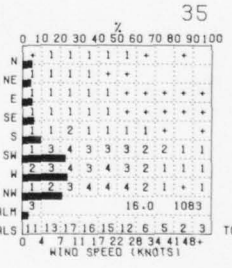


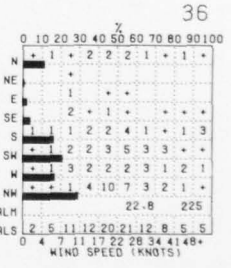


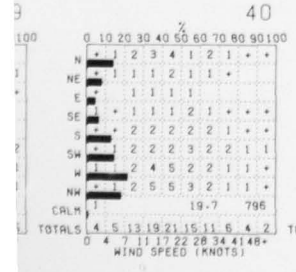


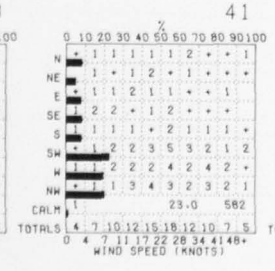














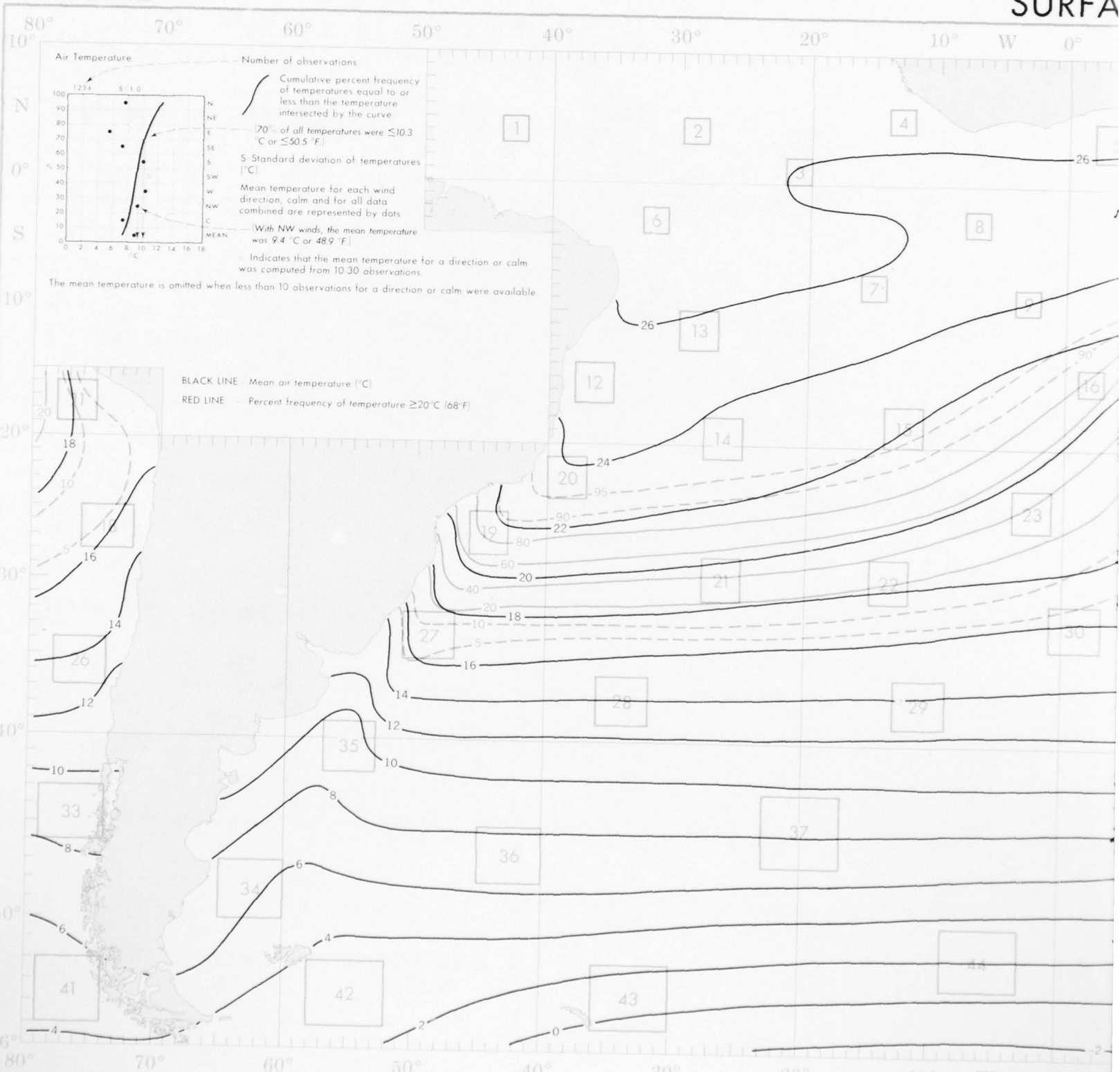
43 INSUFFICIENT DATA

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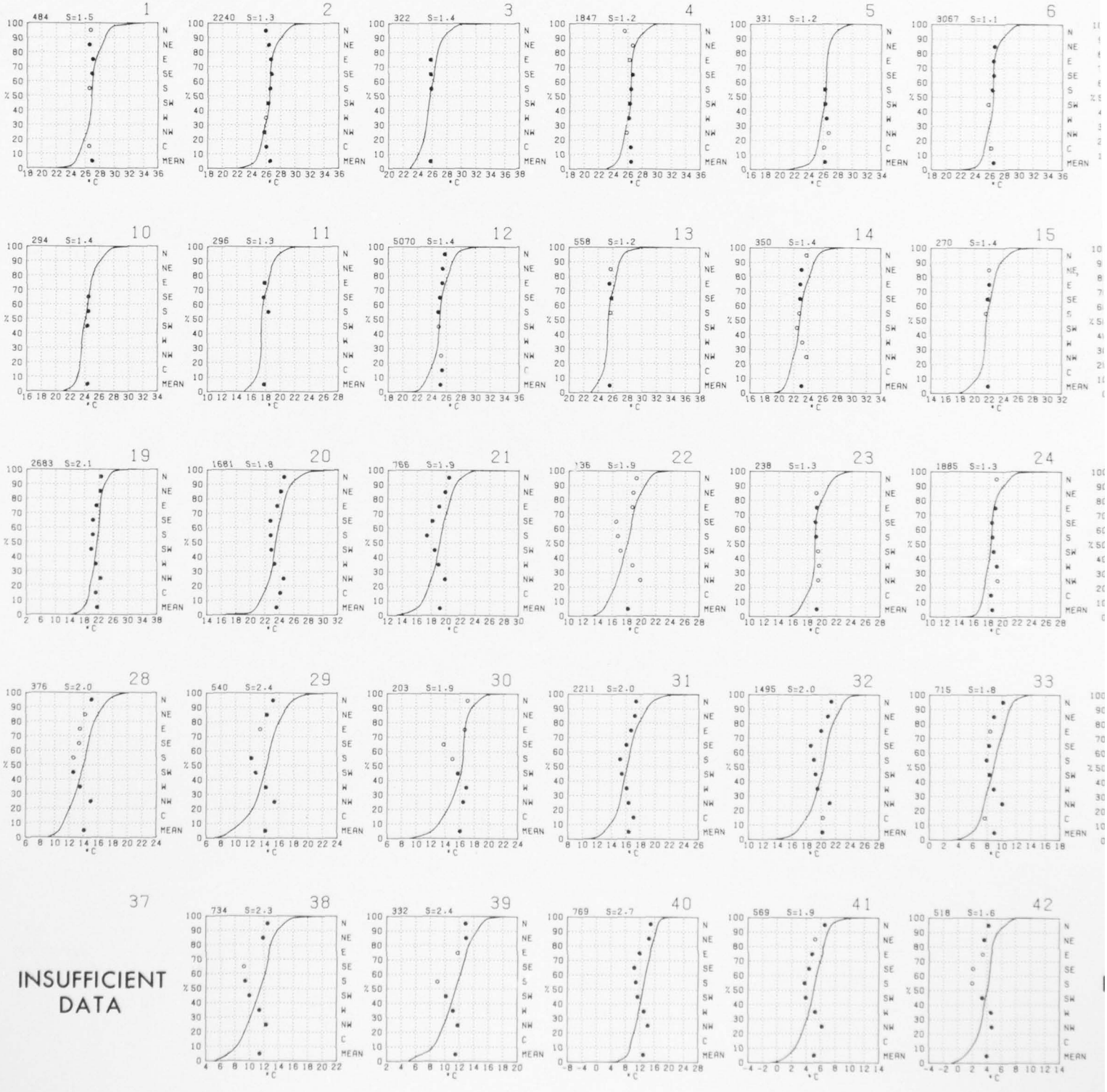
JUNE


Air Temperature
Number of observations
1234
S=1.0
Cumulative percent frequency of temperatures equal to or less than the temperature intersected by the curve
[70% of all temperatures were ≤10.3 °C or ≤50.5 °F.]
S Standard deviation of temperatures (°C)
Mean temperature for each wind direction, calm and for all data combined are represented by dots.
[With NW winds, the mean temperature was 9.4 °C or 48.9 °F.]
Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.
The mean temperature is omitted when less than 10 observations for a direction or calm were available.
N
NE
E
SE
S
SW
W
NW
C
MEAN
%
°C
BLACK LINE — Mean air temperature (°C)
RED LINE — Percent frequency of temperature ≥20°C (68°F)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
N
0°
S
10°
20°
30°
40°
50°
60°
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10
5

SURFACE AIR TEMPERATURE

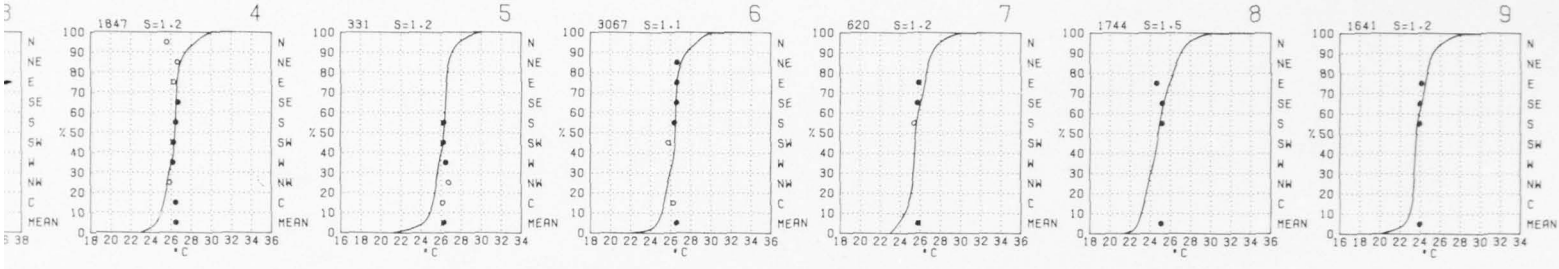


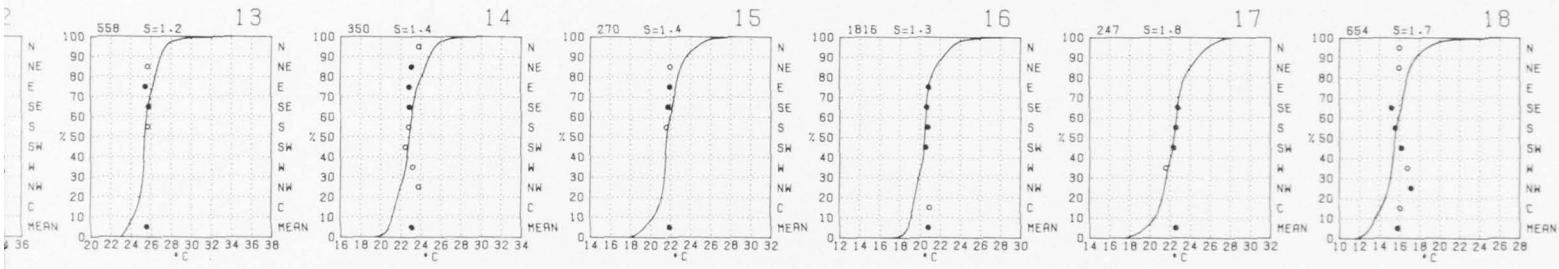
SURFACE AIR TEMPERATURE

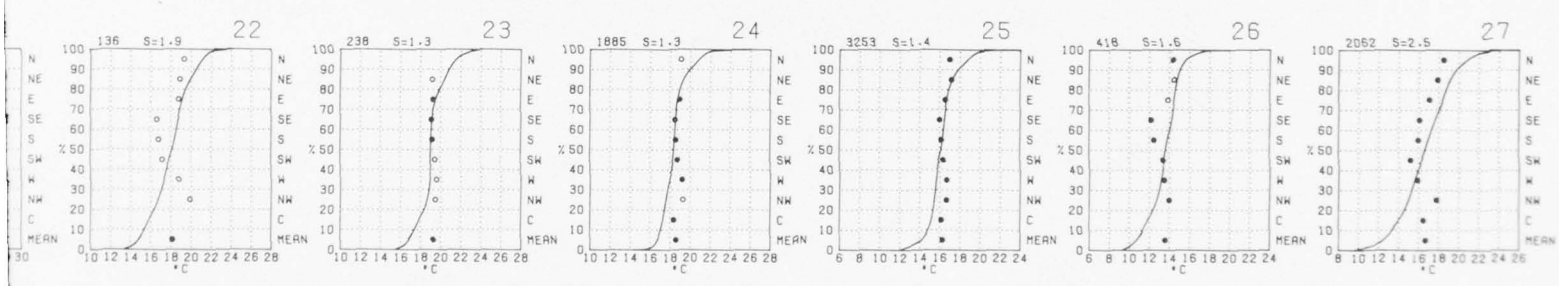


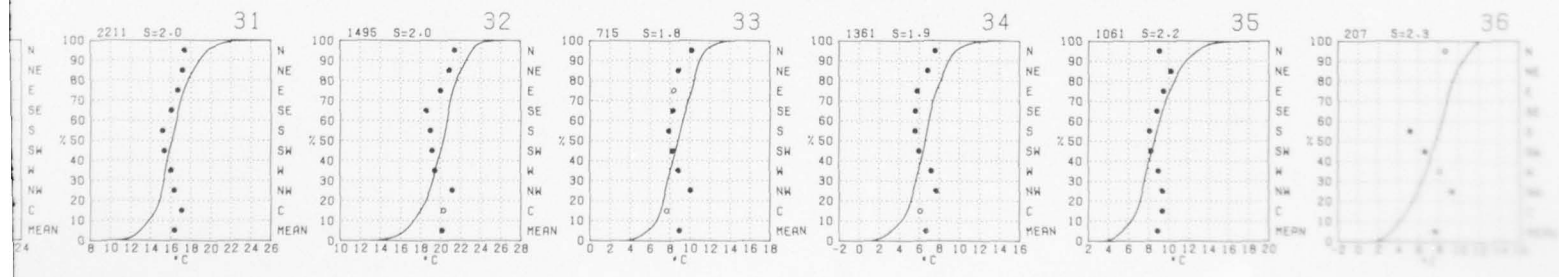
INSUFFICIENT DATA

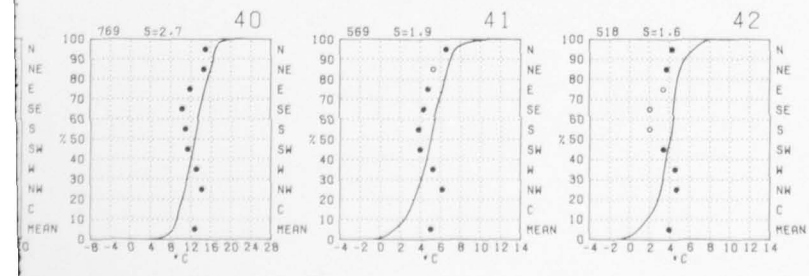
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where











43

INSUFFICIENT DATA

44

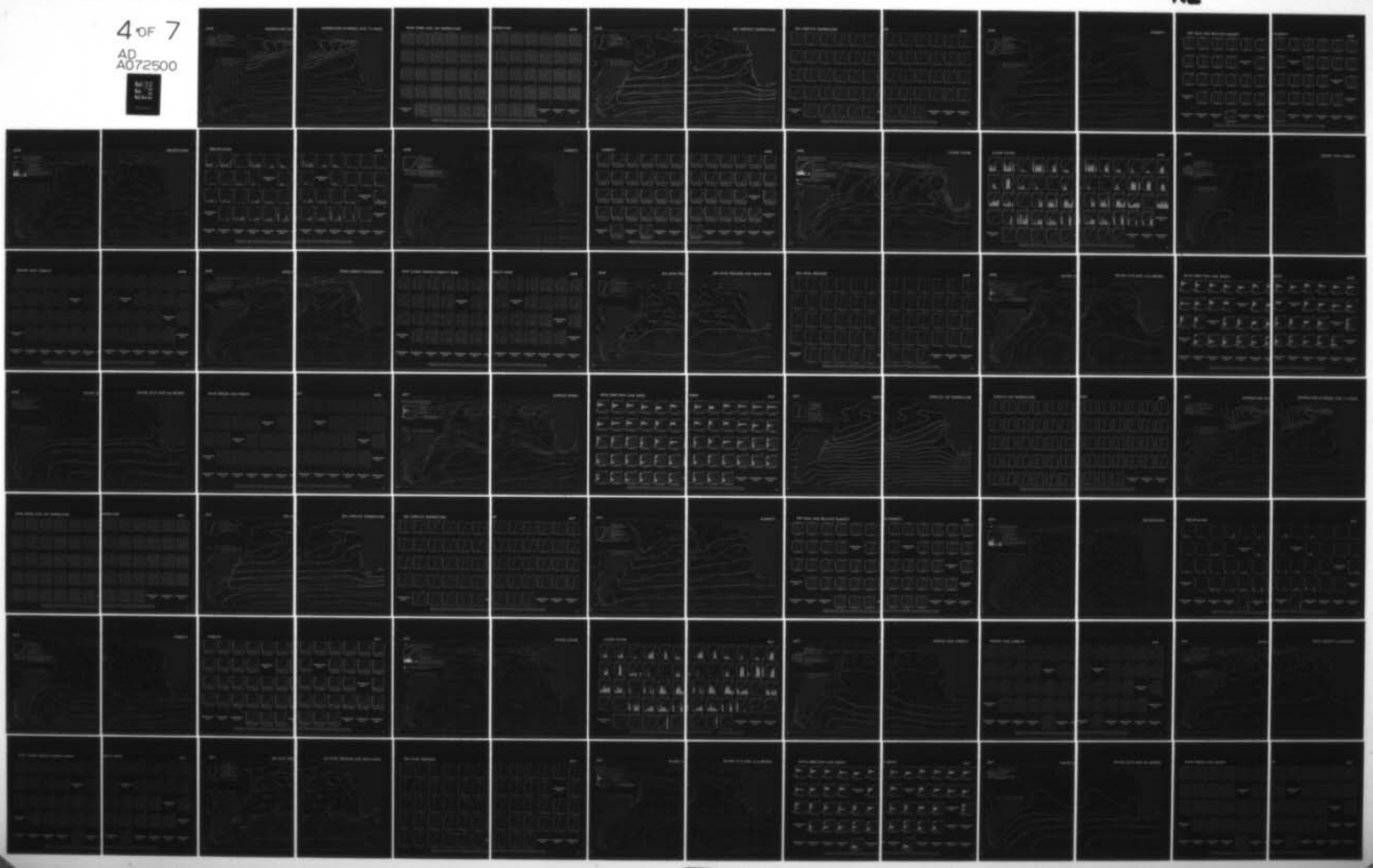
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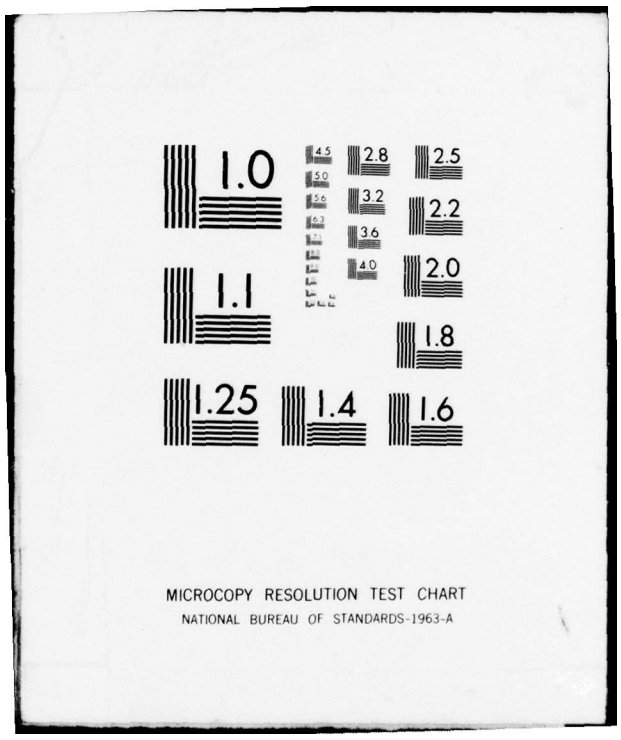
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Talyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

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U. S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD. VOLUME IV. SOUTH--ETC(U)
MAR 78
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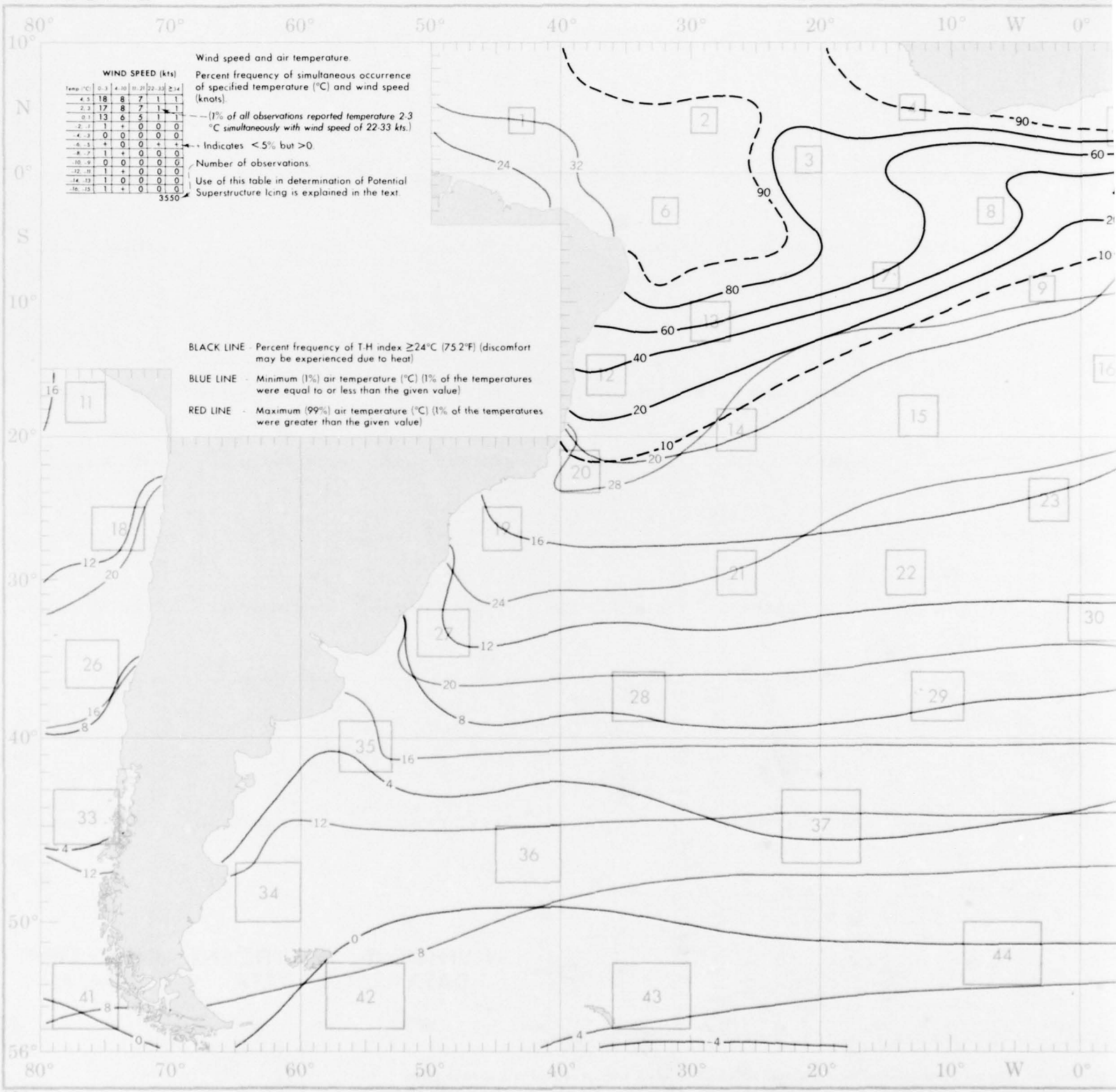
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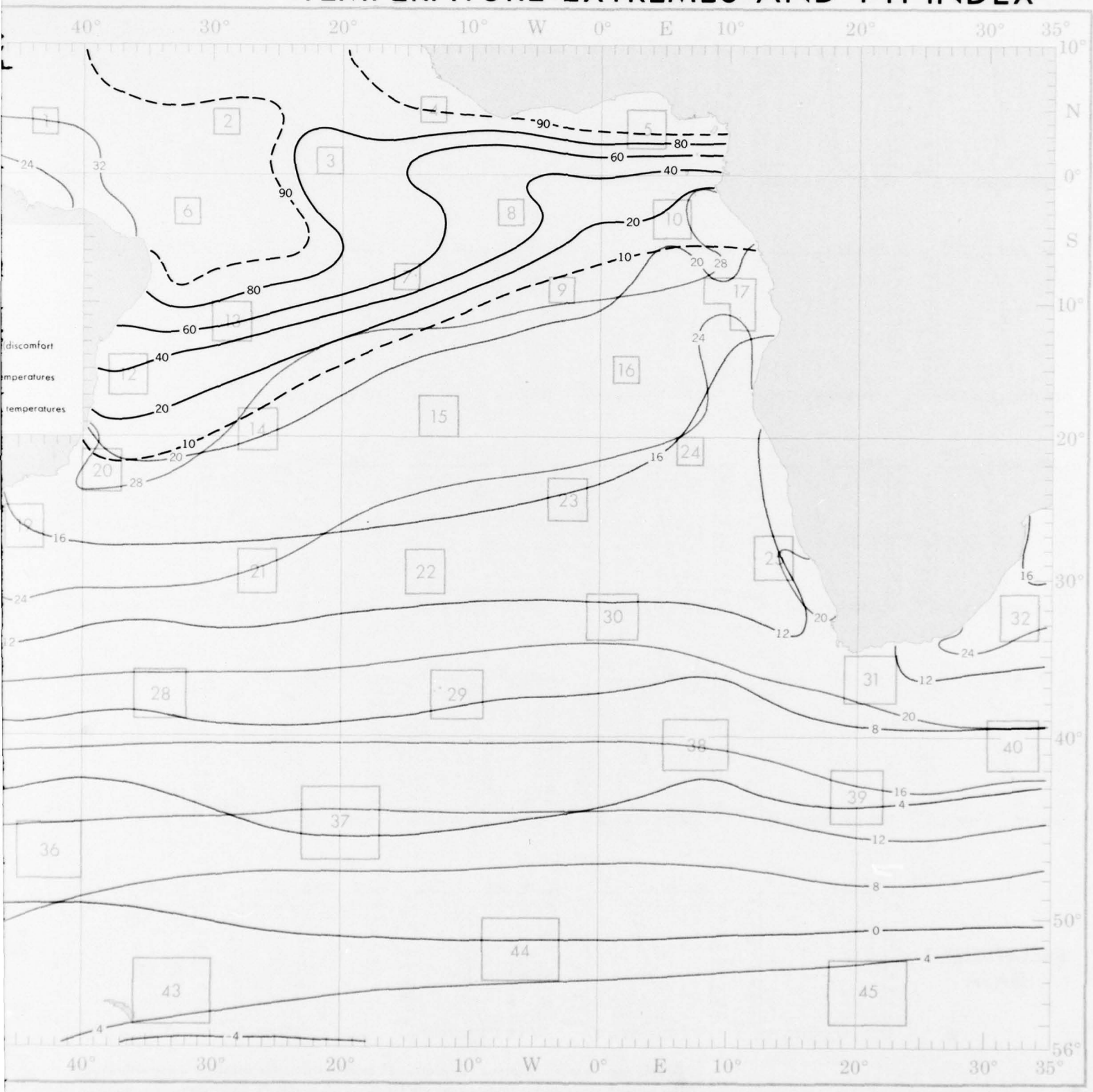

1.0
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2.5
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

JUNE

TEMPERATURE EXTI



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	2	1	0	0
28.29	3	16	8	0	0
26.27	8	32	17	1	0
24.25	1	5	3	+	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

485

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	+	1	1	+	0
28.29	2	11	6	+	0
26.27	9	37	16	1	0
24.25	3	8	3	+	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2250

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	+	+	0	0
28.29	0	6	6	0	0
26.27	1	20	25	1	0
24.25	1	19	19	0	0
22.23	0	1	2	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

322

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	+	0	0
28.29	2	8	7	+	0
26.27	6	33	25	1	0
24.25	1	8	7	+	0
22.23	+	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1876

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	1	8	4	+	0
26.27	4	36	26	2	0
24.25	2	8	8	+	0
22.23	+	+	1	0	0
20.21	+	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

332

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	+	0	0	0
30.31	+	1	+	+	0
28.29	+	8	9	+	0
26.27	2	32	33	2	0
24.25	+	5	6	1	0
22.23	+	+	+	0	0
20.21	0	0	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

3070

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	2	1	0	0
26.27	2	11	6	0	0
24.25	2	39	12	0	0
22.23	2	21	2	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

294

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	1	0	0
20.21	+	5	3	+	0
18.19	2	22	25	1	0
16.17	2	13	21	3	0
14.15	0	1	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

297

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	+	+	+	0
28.29	1	3	2	+	0
26.27	3	18	13	1	0
24.25	3	25	20	3	+
22.23	1	3	3	+	+
20.21	0	+	+	0	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

5081

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	+	0	0
28.29	1	1	4	1	0
26.27	1	7	34	7	0
24.25	1	10	24	7	0
22.23	+	+	1	1	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

558

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	0	+	0	0
26.27	1	1	2	1	0
24.25	3	11	12	3	1
22.23	4	17	30	4	0
20.21	+	4	4	2	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

350

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	0	1	1	0	0
24.25	0	5	1	1	0
22.23	3	18	22	4	0
20.21	3	16	18	3	+
18.19	0	1	1	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

272

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	+	+	0	0
26.27	+	1	1	+	0
24.25	1	6	6	1	+
22.23	3	16	17	3	+
20.21	3	12	11	3	+
18.19	1	4	5	1	+
16.17	+	1	1	1	+
14.15	0	+	+	+	+
12.13	0	0	0	0	+
10.11	0	0	0	0	0

2688

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	+	0	0
28.29	+	1	+	0	0
26.27	1	5	4	1	0
24.25	4	17	16	3	0
22.23	4	16	15	2	+
20.21	+	3	4	1	+
18.19	+	+	+	+	0
16.17	0	+	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1681

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	+	+	0
22.23	1	2	5	2	0
20.21	2	11	17	7	1
18.19	3	9	13	7	2
16.17	1	4	6	2	1
14.15	+	+	1	1	0
12.13	0	0	0	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

767

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	1	1	1	0	0
20.21	4	7	8	1	2
18.19	1	15	18	4	3
16.17	2	10	6	4	1
14.15	0	2	3	3	1
12.13	0	0	0	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

136

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	1	2	1	+	0
20.21	2	16	13	4	0
18.19	2	24	23	5	0
16.17	1	3	2	+	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

238

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	0	+	0	0
22.23	+	2	1	0	0
20.21	1	8	7	1	+
18.19	4	23	30	6	+
16.17	2	5	8	2	+
14.15	+	0	+	+	+
12.13	+	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1918

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	1	1	2
16.17	0	4	7	5	3
14.15	2	7	10	13	9
12.13	1	5	9	7	3
10.11	0	2	3	3	1
8.9	0	0	0	1	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

376

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	+	1	+
18.19	0	1	1	1	1
16.17	+	2	8	8	4
14.15	1	5	14	11	6
12.13	1	3	9	6	2
10.11	0	1	3	3	1
8.9	0	+	1	2	1
6.7	0	0	0	1	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

541

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	+	1	0	0	0
18.19	0	7	11	4	0
16.17	0	20	16	6	1
14.15	1	14	7	3	0
12.13	+	5	0	+	1
10.11	0	1	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

204

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	+	+	+	0
20.21	1	2	2	1	+
18.19	2	7	6	3	2
16.17	4	12	14	7	5
14.15	2	7	8	5	5
12.13	+	1	1	1	1
10.11	0	+	+	+	+
8.9	0	0	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

2219

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	1	1	+
22.23	2	6	10	7	1
20.21	3	10	13	9	3
18.19	2	6	8	4	2
16.17	+	2	2	2	2
14.15	+	0	+	1	1
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1500

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	0	+	0
12.13	+	1	4	2	1
10.11	2	8	13	8	3
8.9	2	11	13	9	3
6.7	1	5	6	4	2
4.5	+	1	1	1	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

715

37

INSUFFICIENT DATA

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	+	0	+	0	0
16.17	0	0	1	1	+
14.15	1	2	3	7	4
12.13	+	3	11	15	7
10.11	+	5	10	8	4
8.9	0	2	5	4	2
6.7	+	1	2	1	1
4.5	0	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0

734

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	+	0	0
16.17	0	0	1	2	1
14.15	0	1	5	6	6
12.13	2	4	8	9	9
10.11	1	4	4	12	5
8.9	0	3	4	3	3
6.7	+	1	2	1	2
4.5	0	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

332

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	0	+	0
20.21	0	0	+	0	0
18.19	0	1	1	1	+
16.17	+	2	8	5	2
14.15	1	4	10	5	2
12.13	1	6	12	6	2
10.11	1	3	6	6	3
8.9	1	2	3	2	1
6.7	+	0	+	1	+
4.5	+	+	+	0	0
2.3	0	0	0	0	0

770

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	+	+	1	+
8.9	0	+	2	2	2
6.7	2	8	9	9	8
4.5	1	6	11	12	7
2.3	1	2	4	5	2
0.1	0	1	1	1	2
-2.-1	0	0	+	0	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

569

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	+	0	0	+
6.7	0	2	5	6	2
4.5	5	12	16	14	5
2.3	1	8	8	6	3
0.1	1	1	2	1	+
-2.-1	+	+	0	+	1
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

518

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

EMPERATURE

JUNE

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	+	0	0
28.29	2	8	7	+	0
26.27	6	33	25	1	0
24.25	1	8	7	+	0
22.23	+	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1876

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	1	8	4	+	0
26.27	4	36	26	2	0
24.25	2	8	8	+	0
22.23	+	+	1	0	0
20.21	+	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

332

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	+	+	0	0	0
30.31	+	1	+	+	0
28.29	+	8	9	+	0
26.27	2	32	33	2	0
24.25	+	5	6	1	0
22.23	+	+	+	0	0
20.21	0	0	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

3070

WIND SPEED (KTS) 7

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	0	2	5	+	0
26.27	+	7	37	4	0
24.25	0	7	32	3	+
22.23	0	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

621

WIND SPEED (KTS) 8

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	1	0	0
28.29	0	3	3	0	0
26.27	+	14	17	+	0
24.25	1	27	20	+	0
22.23	1	9	3	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1747

WIND SPEED (KTS) 9

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	0	+	0
28.29	0	1	+	+	0
26.27	+	4	5	+	0
24.25	1	19	33	1	0
22.23	+	12	21	1	0
20.21	0	+	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1644

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	+	0	0
28.29	1	1	4	1	0
26.27	1	7	34	7	0
24.25	1	10	24	7	0
22.23	+	+	1	1	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

558

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	0	+	0	0
26.27	1	1	2	1	0
24.25	3	11	12	3	1
22.23	4	17	30	4	0
20.21	+	4	4	2	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

350

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	0	1	1	0	0
24.25	0	5	1	1	0
22.23	3	18	22	4	0
20.21	3	16	18	3	+
18.19	0	1	1	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

272

WIND SPEED (KTS) 16

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	+	+	0	0
24.25	+	1	1	0	0
22.23	1	8	9	1	0
20.21	3	30	30	2	+
18.19	1	6	5	1	0
16.17	0	+	+	0	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1833

WIND SPEED (KTS) 17

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	+	0	0
26.27	2	2	1	0	0
24.25	4	12	7	0	0
22.23	3	33	12	+	0
20.21	2	13	2	+	0
18.19	0	3	1	0	0
16.17	+	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

252

WIND SPEED (KTS) 18

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	+	+	+	0	0
20.21	+	1	1	+	0
18.19	2	5	3	+	+
16.17	7	19	14	1	+
14.15	5	16	13	4	0
12.13	1	2	4	+	0
10.11	0	+	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

655

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	1	1	1	0	0
20.21	4	7	8	1	2
18.19	1	15	18	4	3
16.17	2	10	6	4	1
14.15	0	2	3	3	1
12.13	0	0	0	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

136

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	1	2	1	+	0
20.21	2	16	13	4	0
18.19	2	24	23	5	0
16.17	1	3	2	+	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

238

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	0	+	0	0
22.23	+	2	1	0	0
20.21	1	8	7	1	+
18.19	4	23	30	6	+
16.17	2	5	8	2	+
14.15	+	0	+	+	+
12.13	+	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1918

WIND SPEED (KTS) 25

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	0	+	0	0
22.23	0	+	+	0	0
20.21	+	1	1	+	0
18.19	2	8	5	1	+
16.17	6	23	21	6	+
14.15	2	8	11	4	1
12.13	0	1	+	+	+
10.11	0	0	0	0	0
8.9	0	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

3311

WIND SPEED (KTS) 26

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	0	+	0	0	0
16.17	2	4	3	+	+
14.15	5	19	16	6	4
12.13	3	8	12	5	1
10.11	1	4	3	2	1
8.9	0	+	0	0	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

418

WIND SPEED (KTS) 27

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	0	0	+
24.25	+	+	+	0	0
22.23	+	+	1	1	+
20.21	1	3	5	2	+
18.19	2	10	8	4	1
16.17	4	10	10	4	2
14.15	1	7	7	4	3
12.13	1	2	2	2	1
10.11	+	+	1	+	+
8.9	0	+	+	+	0
6.7	0	0	0	0	0

2062

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	+	+	+	0
20.21	1	2	2	1	+
18.19	2	7	6	3	2
16.17	4	12	14	7	5
14.15	2	7	8	5	5
12.13	+	1	1	1	1
10.11	0	+	+	+	+
8.9	0	0	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

2219

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	1	1	+
22.23	2	6	10	7	1
20.21	3	10	13	9	3
18.19	2	6	8	4	2
16.17	+	2	2	2	2
14.15	+	0	+	1	1
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1500

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	0	+	0
12.13	+	1	4	2	1
10.11	2	8	13	8	3
8.9	2	11	13	9	3
6.7	1	5	6	4	2
4.5	+	1	1	1	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

715

WIND SPEED (KTS) 34

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	0	0	0
12.13	0	0	1	+	0
10.11	+	1	3	2	1
8.9	2	7	10	6	2
6.7	2	14	13	8	3
4.5	2	7	5	3	3
2.3	+	2	1	1	1
0.1	0	+	0	+	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

1361

WIND SPEED (KTS) 35

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	+	+
14.15	1	1	1	1	+
12.13	2	4	3	1	1
10.11	1	7	8	4	2
8.9	5	11	11	8	3
6.7	2	7	7	4	3
4.5	1	1	1	1	1
2.3	0	0	0	0	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

1063

WIND SPEED (KTS) 36

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	+	0
10.11	+	1	7	12	2
8.9	+	6	14	7	5
6.7	1	5	6	6	1
4.5	+	4	6	5	4
2.3	0	0	0	2	1
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

207

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	0	+	0
20.21	0	0	+	0	0
18.19	0	1	1	1	+
16.17	+	2	8	5	2
14.15	1	4	10	5	2
12.13	1	6	12	6	2
10.11	1	3	6	6	3
8.9	1	2	3	2	1
6.7	+	0	+	1	+
4.5	+	+	+	0	0
2.3	0	0	0	0	0

770

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	+	+	1	+
8.9	0	+	2	2	2
6.7	2	8	9	9	8
4.5	1	6	11	12	7
2.3	1	2	4	5	2
0.1	0	1	1	1	2
-2.-1	0	0	+	0	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

569

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	+	0	0	+
6.7	0	2	5	6	2
4.5	5	12	16	14	5
2.3	1	8	8	6	3
0.1	1	1	2	1	+
-2.-1	+	+	0	+	1
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

518

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

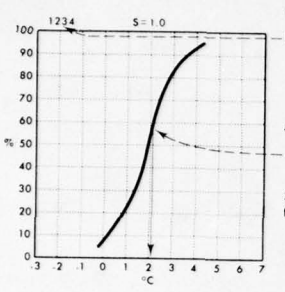
45

INSUFFICIENT DATA

t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE

SEA SU



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of *all observed sea surface temperatures were* ≤2.1°C or ≤35.8°F.)

S- Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

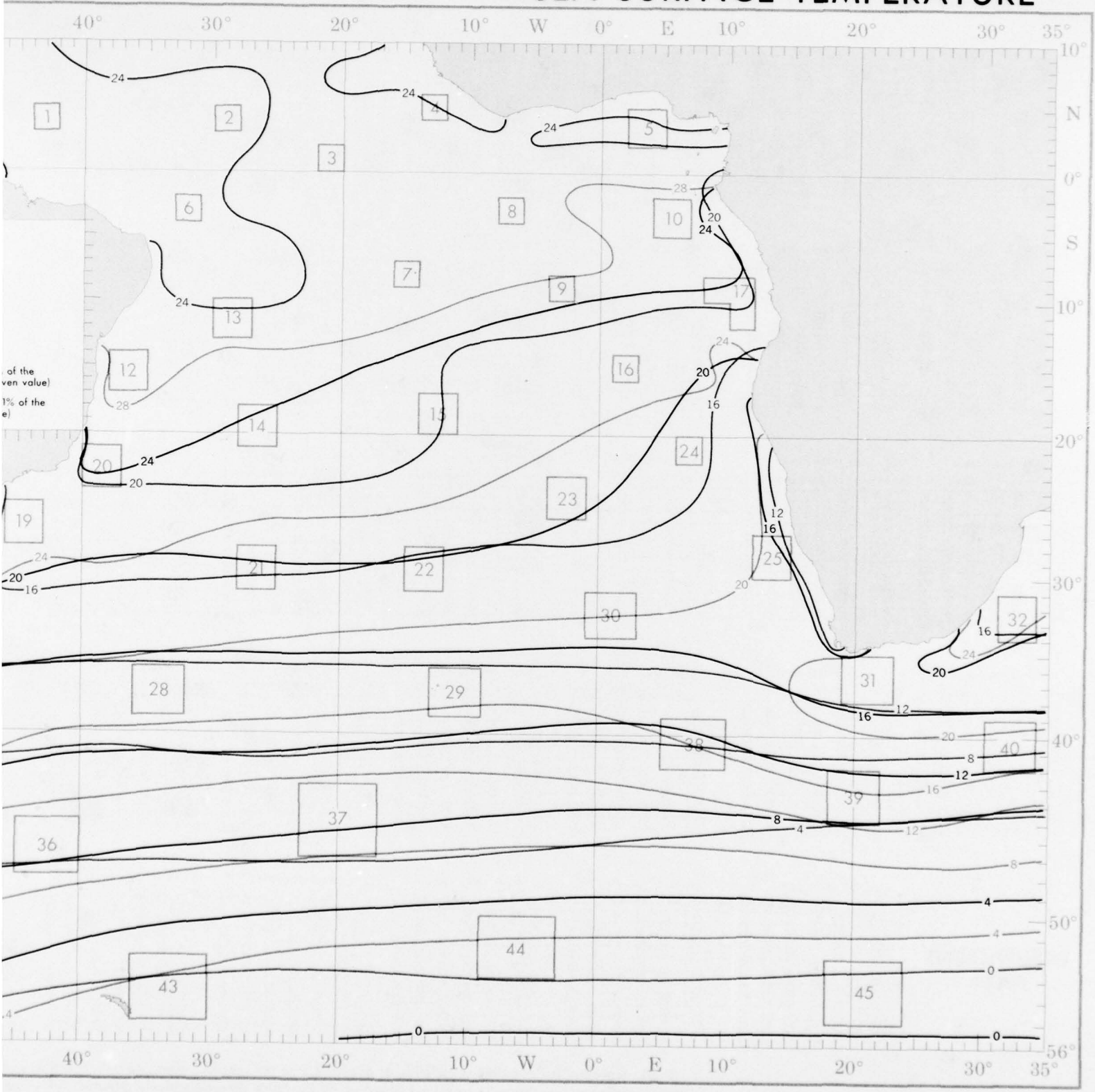
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

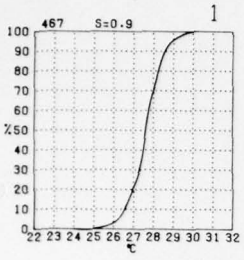
80° 70° 60° 50° 40° 30° 20° 10° W 0°

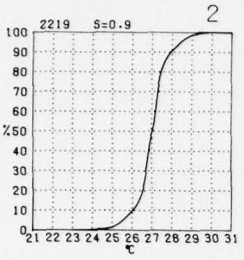
10° N 0° S 10° 20° 30°

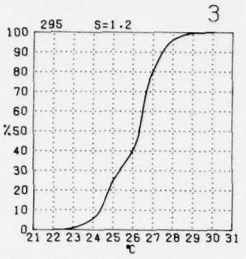
SEA SURFACE TEMPERATURE

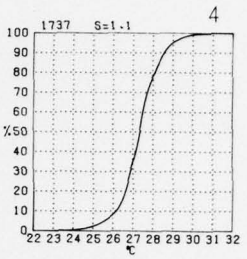


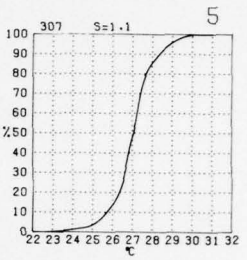
SEA SURFACE TEMPERATURE

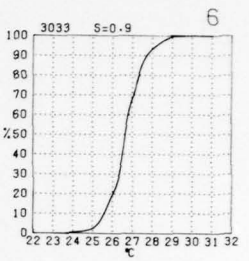


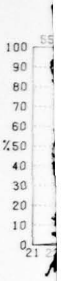


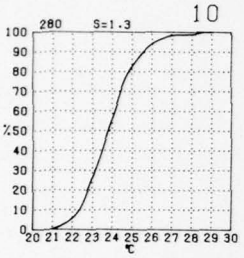


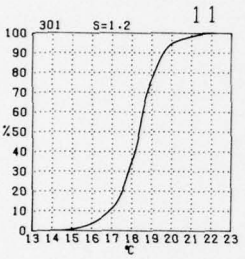


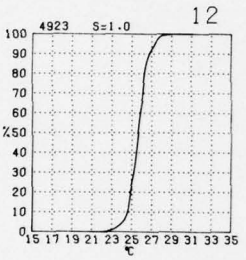


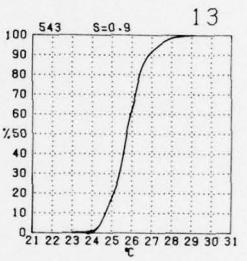


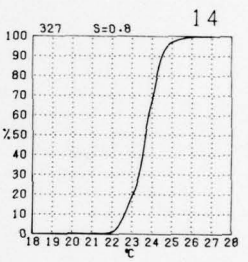


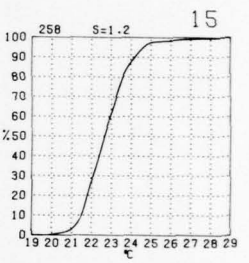


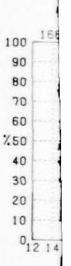


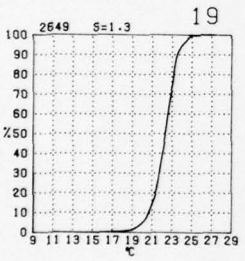


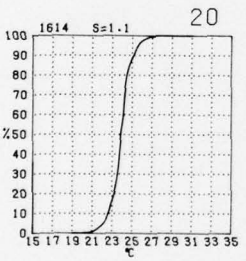


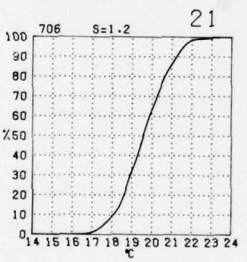


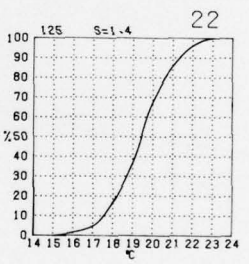


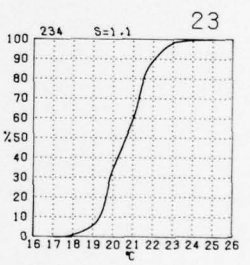


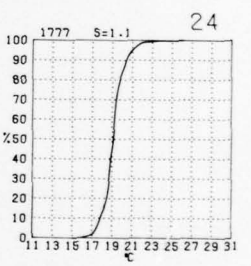


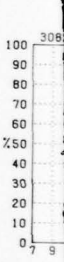


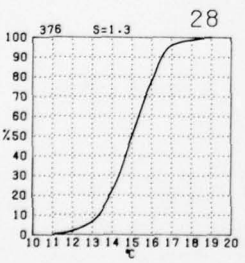


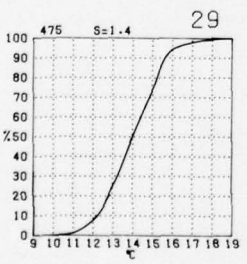


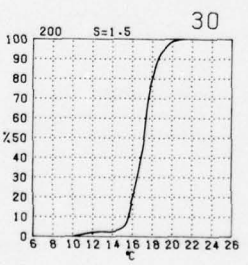


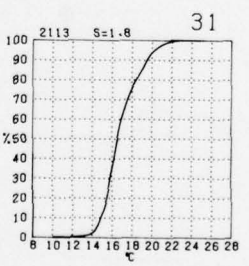


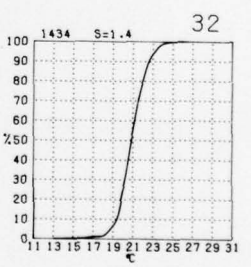


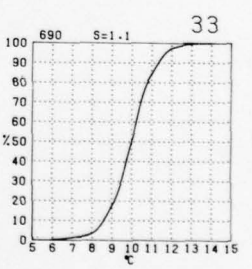


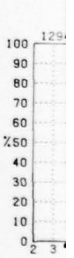






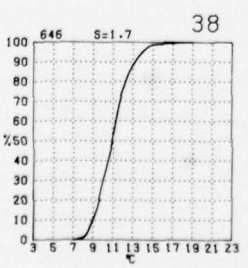


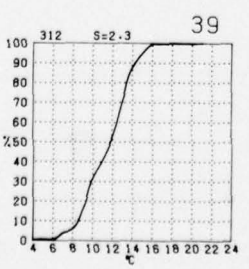


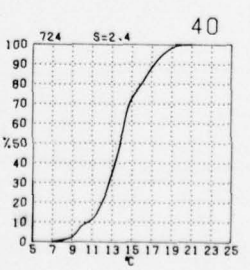


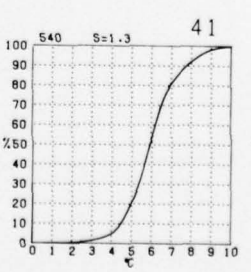
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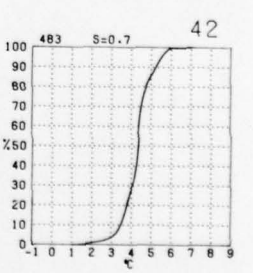
INSUFFICIENT DATA









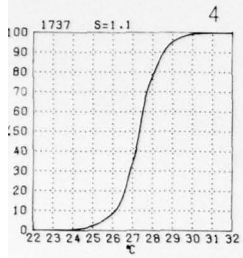


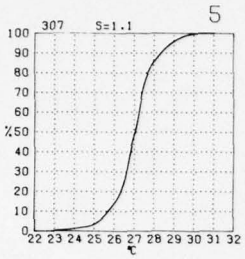
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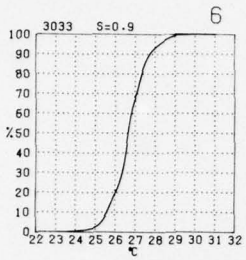
Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

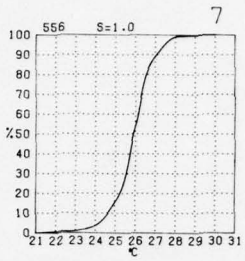
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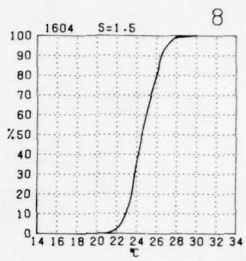
JUNE

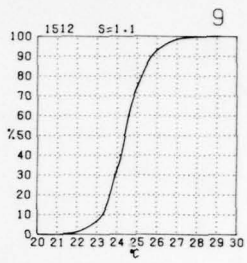


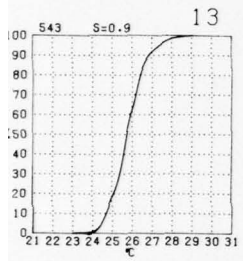


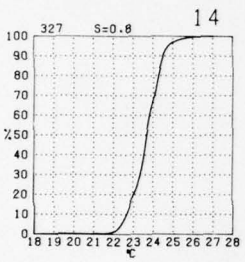


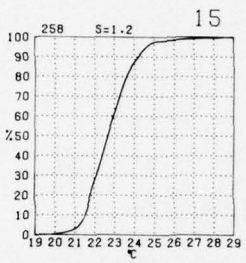


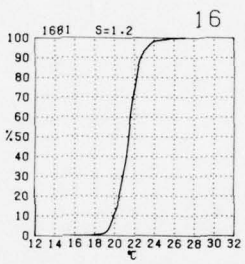


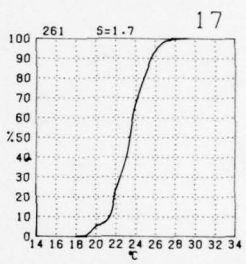


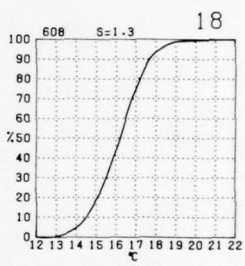


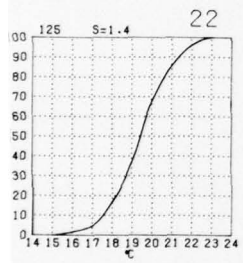


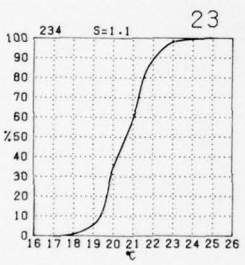


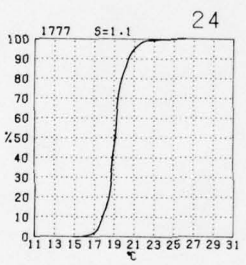


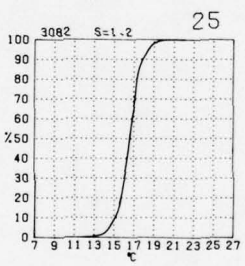


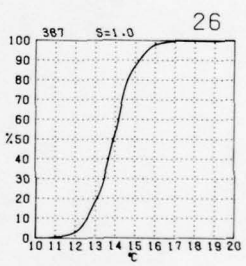


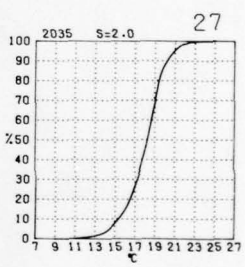


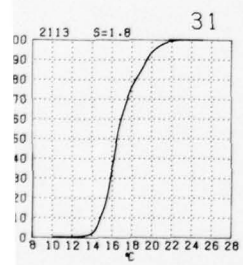


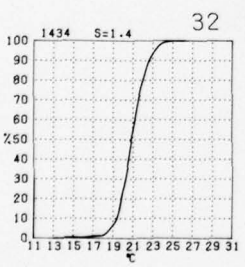


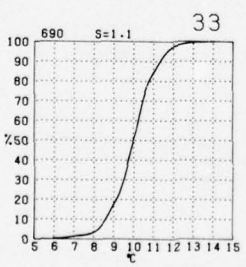


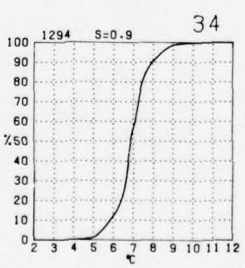


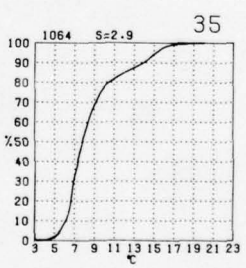


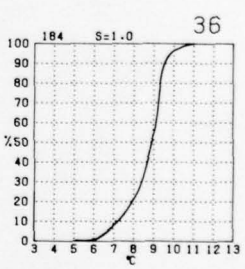


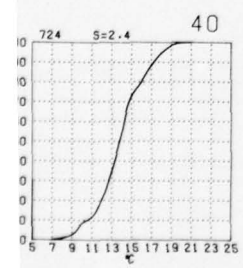


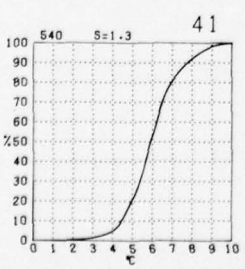


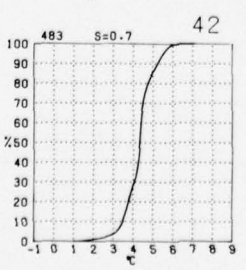












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INSUFFICIENT DATA

44

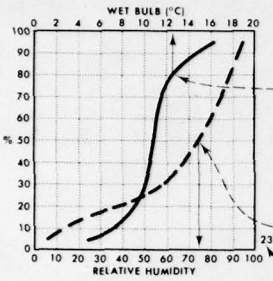
INSUFFICIENT DATA

45

INSUFFICIENT DATA

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

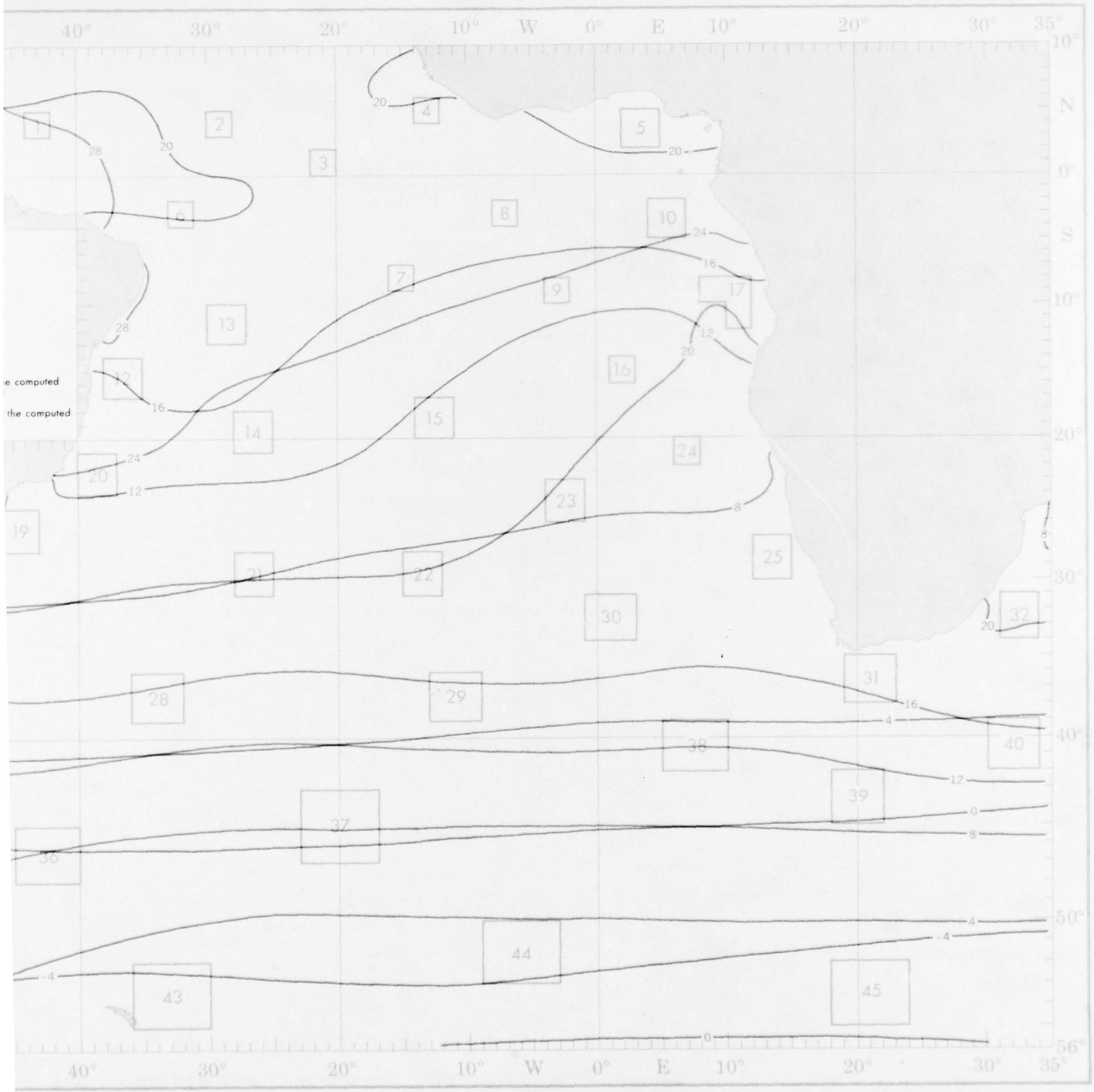
(50% of all observed relative humidities were ≤74%.)

Number of observations.

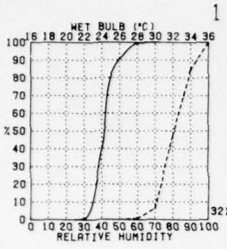
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

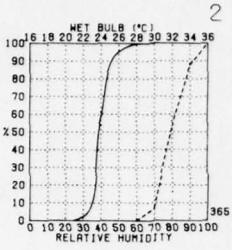
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

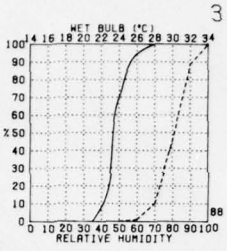
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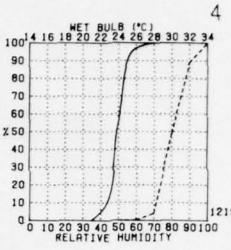

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23 24 25 27 28 29 30 31 32 38 39 40 43 44 45
20 28 20 20 24 16 28 16 12 20 24 12 8 20 16 4 12 0 8 4 4 0
e computed
the computed

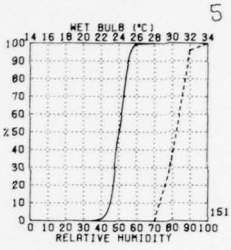
WET BULB AND RELATIVE HUMIDITY

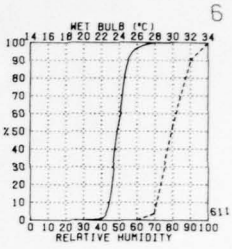
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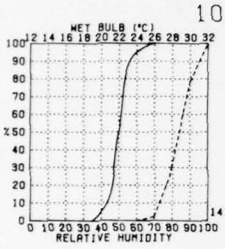
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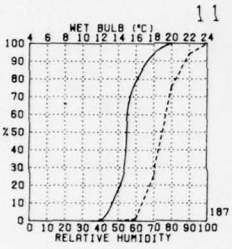
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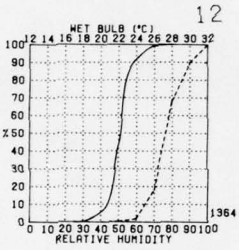
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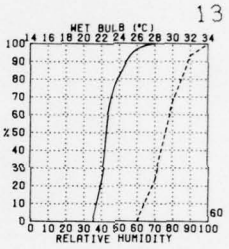
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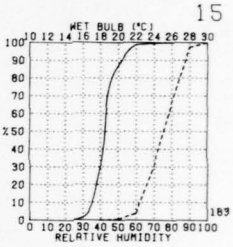
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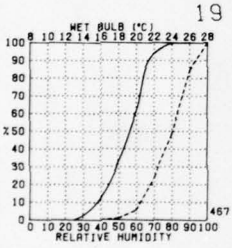
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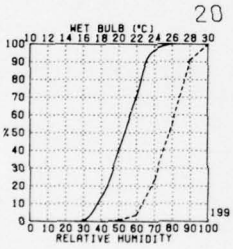
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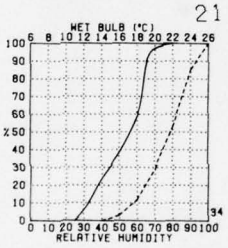
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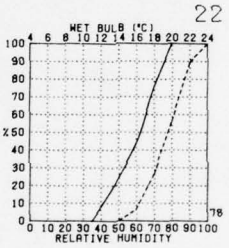
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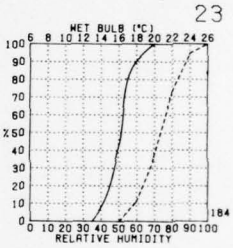
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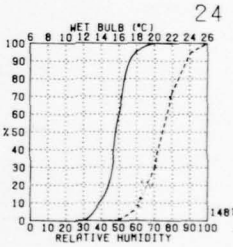
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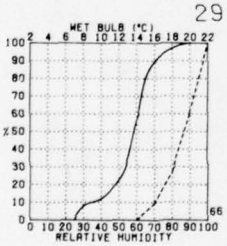
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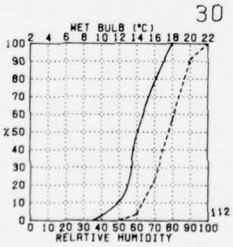
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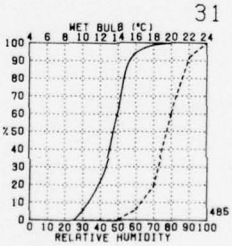
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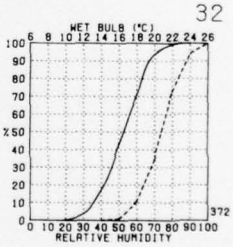
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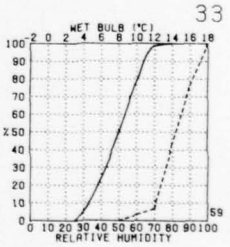
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INSUFFICIENT DATA

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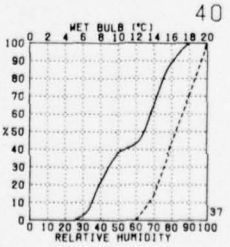
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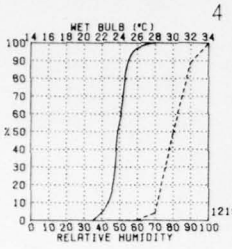
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Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

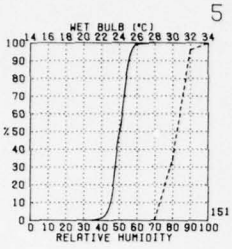
E HUMIDITY

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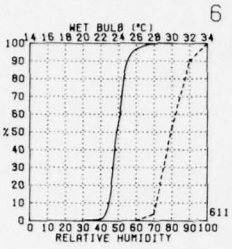
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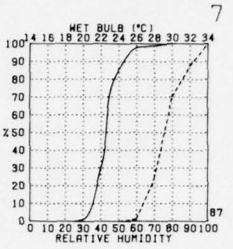
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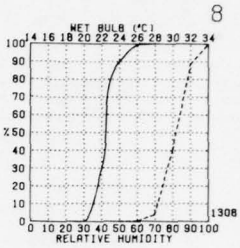
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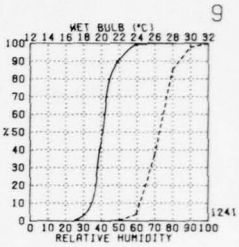
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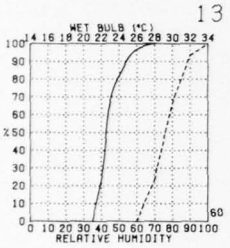
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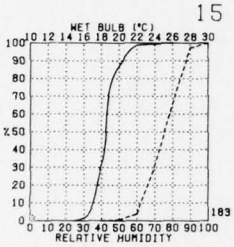
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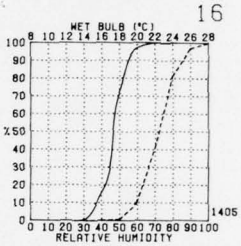
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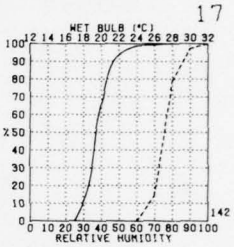
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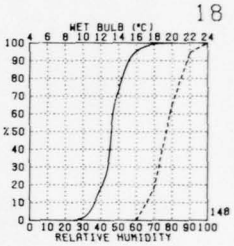
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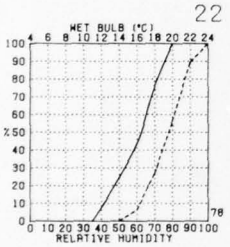
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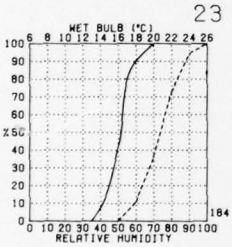
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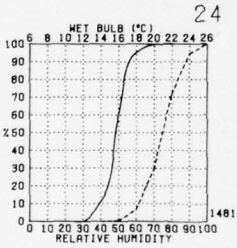
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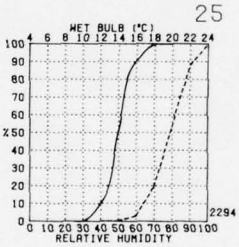
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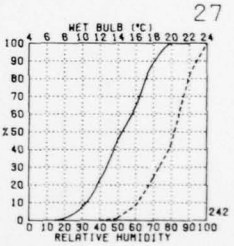
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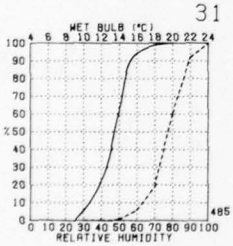
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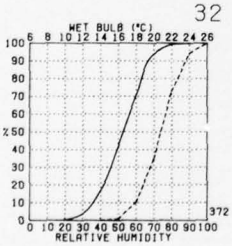
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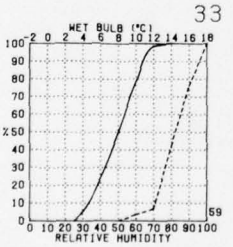
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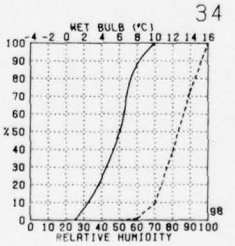
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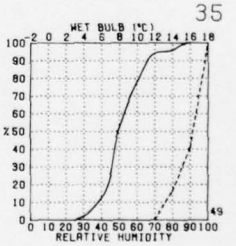
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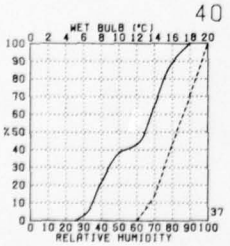
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INSUFFICIENT DATA

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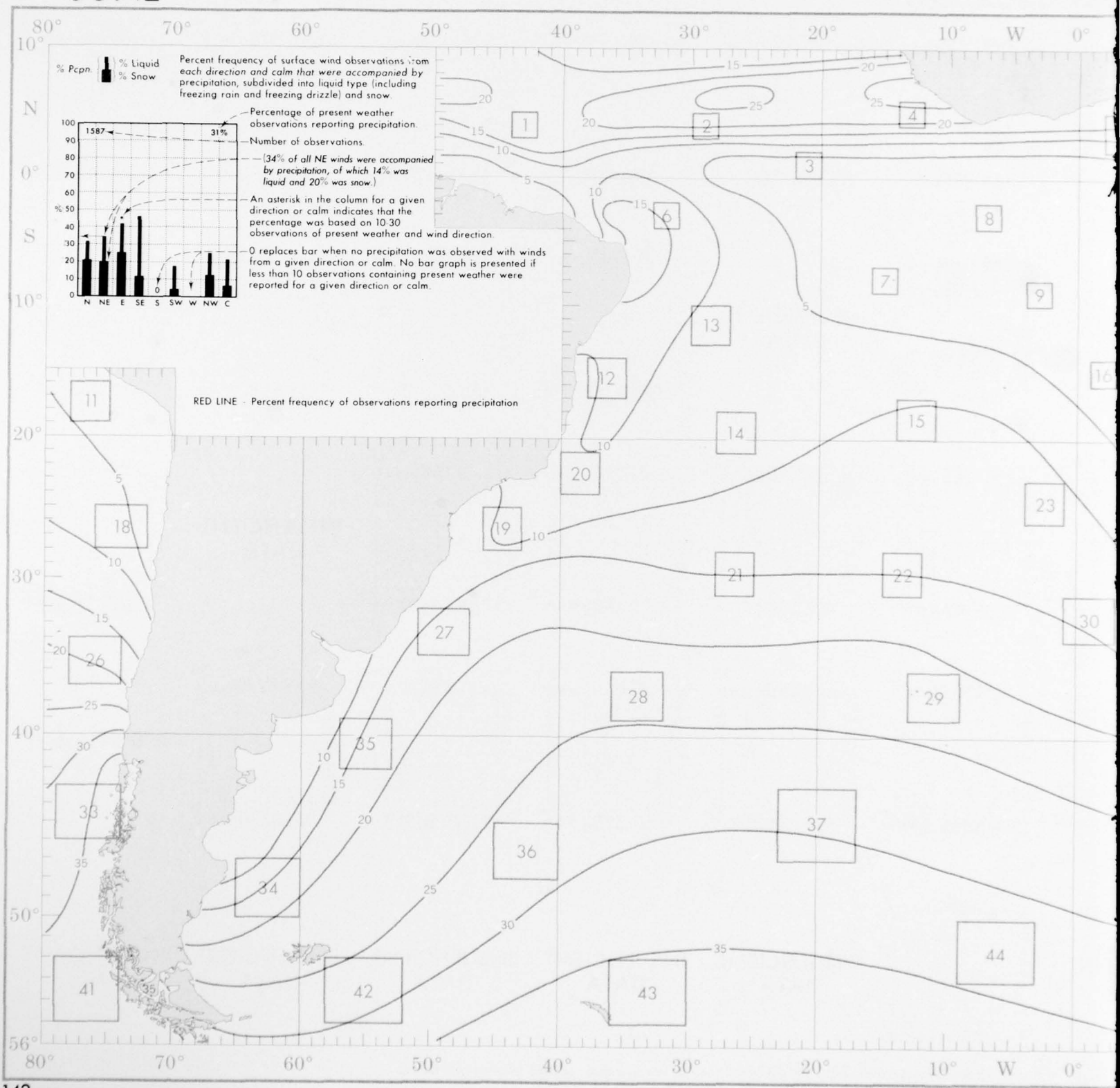
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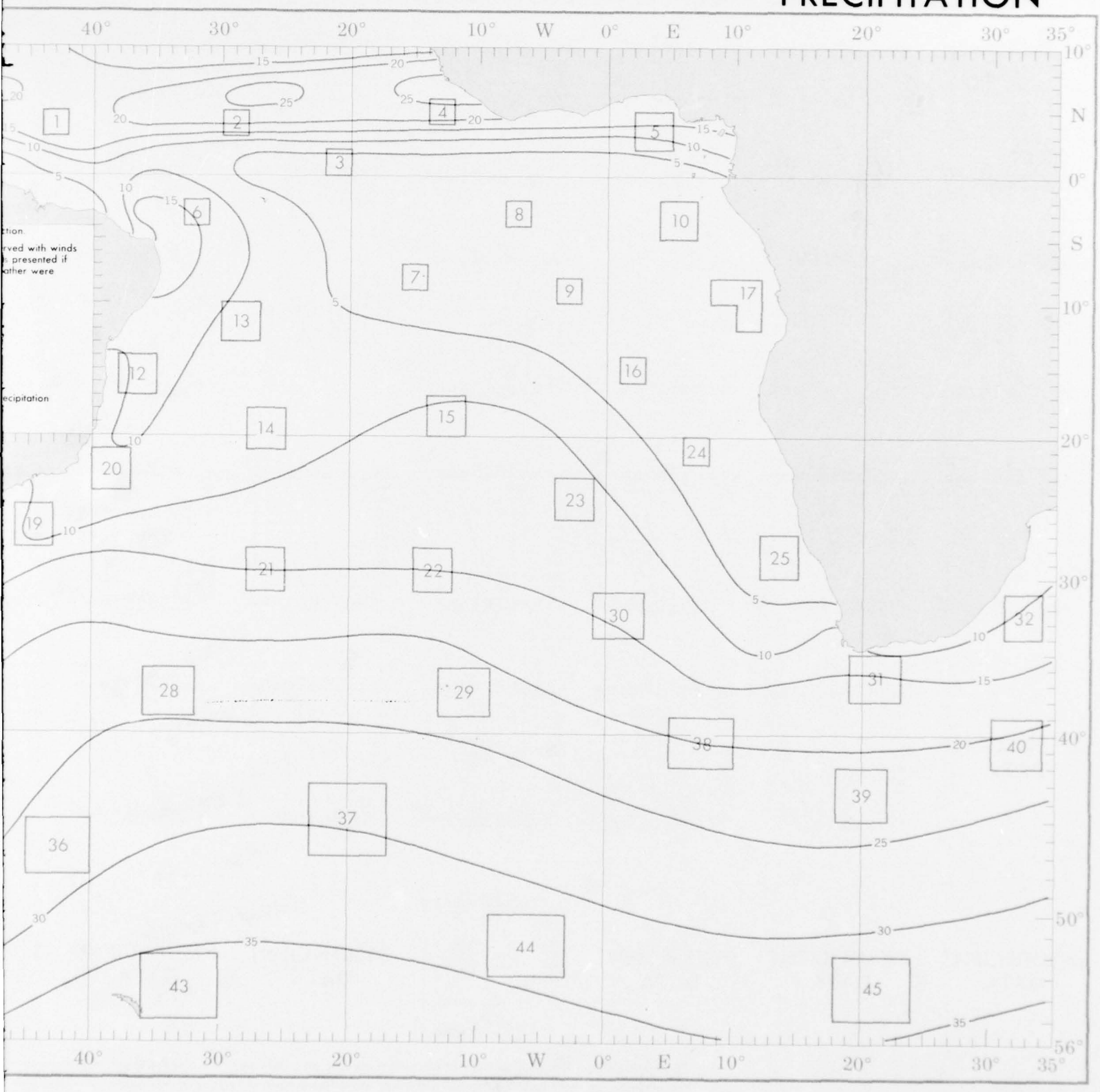
INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

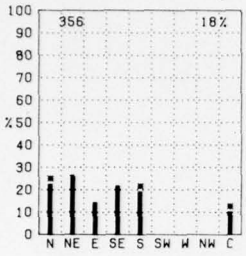
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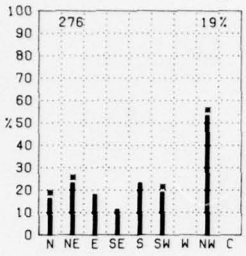

% Pcpn.
% Liquid
% Snow
Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.
Percentage of present weather observations reporting precipitation.
Number of observations.
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)
An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.
1587
31%
N NE E SE S SW W NW C
RED LINE - Percent frequency of observations reporting precipitation
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

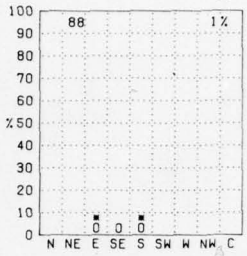
PRECIPITATION

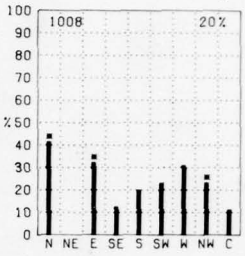


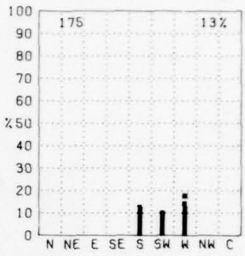
PRECIPITATION

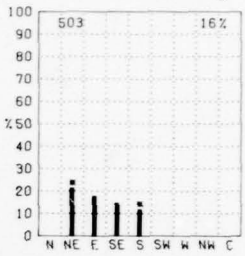


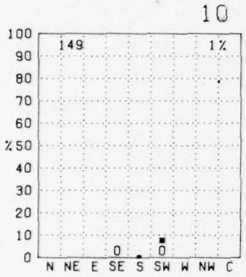


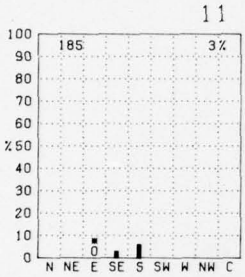


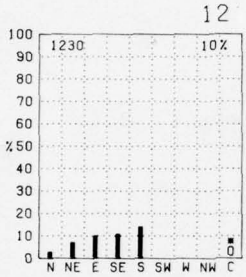


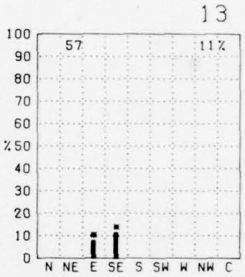






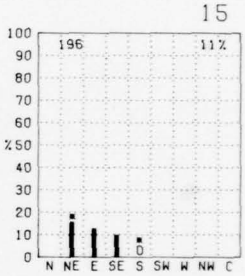


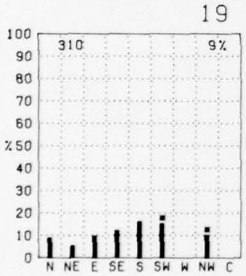


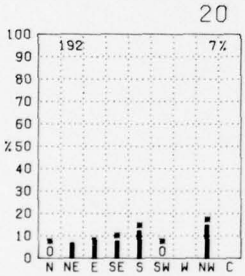


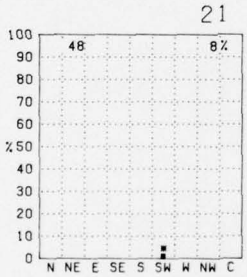
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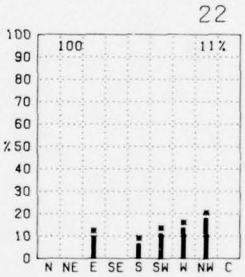
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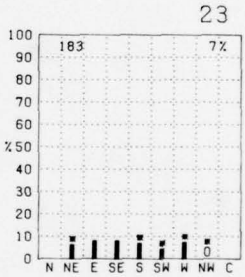


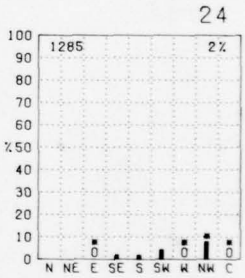






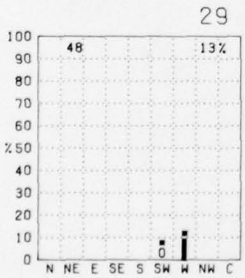


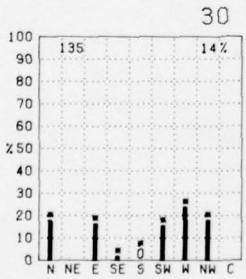


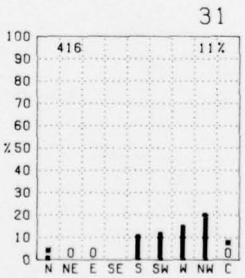


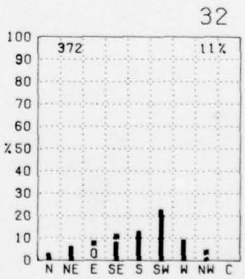
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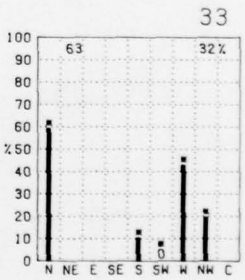
INSUFFICIENT DATA











37 INSUFFICIENT DATA

38 INSUFFICIENT DATA

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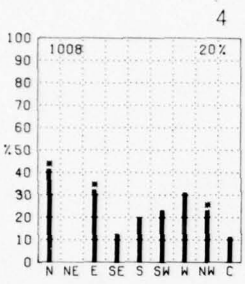
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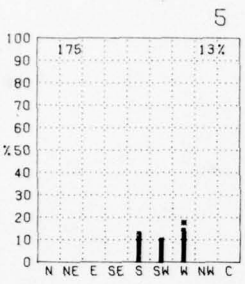
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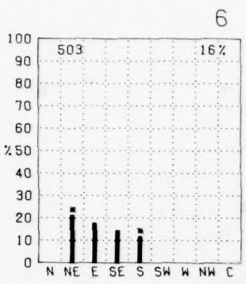
Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

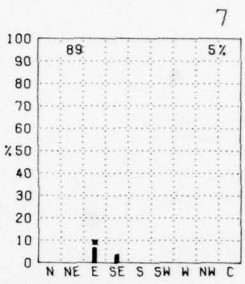
JUNE

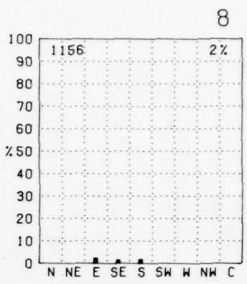


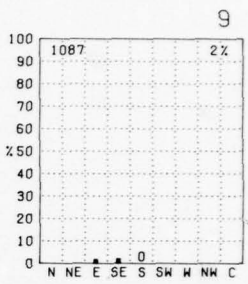




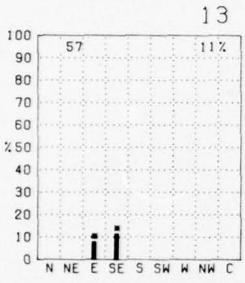






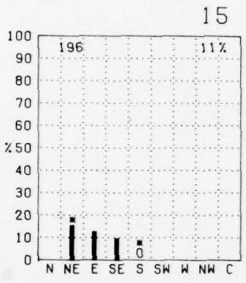


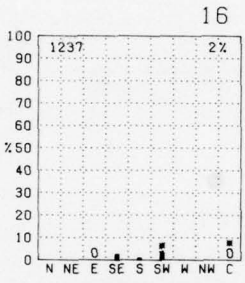


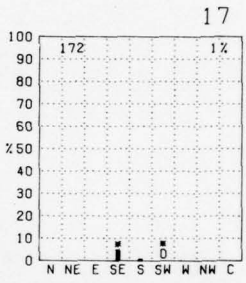


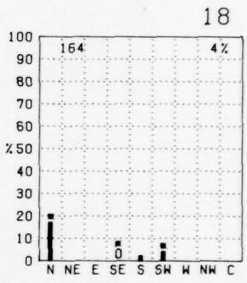
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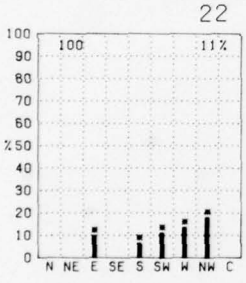


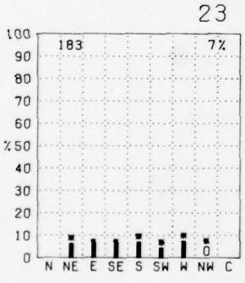


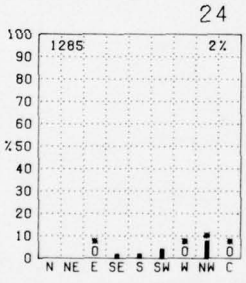


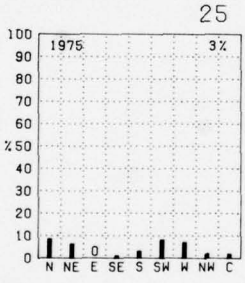






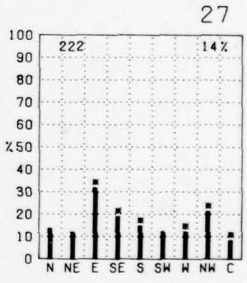




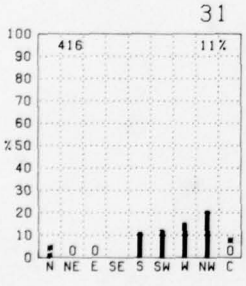


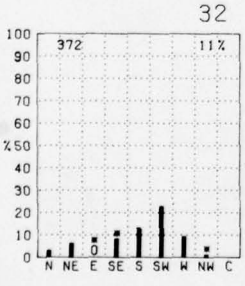
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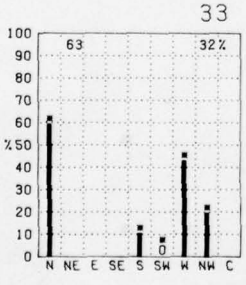
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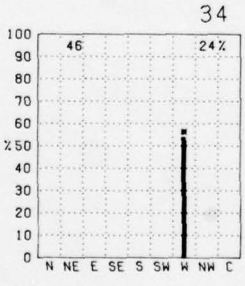


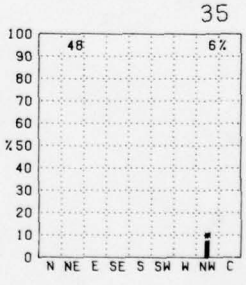












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INSUFFICIENT DATA

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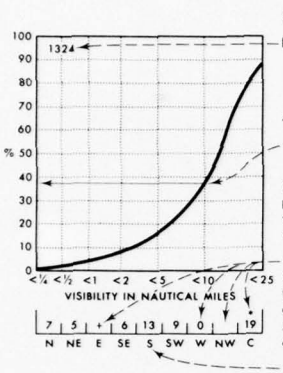
INSUFFICIENT DATA

INSUFFICIENT DATA

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sent the objective compilation of available data for specified areas without regard to suspected biases.
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JUNE



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

+ indicates <5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

RED LINE - Percent frequency of visibilities <2 nautical miles

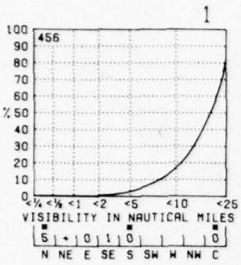
VISIBILITY

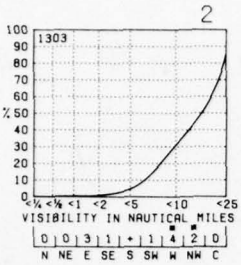


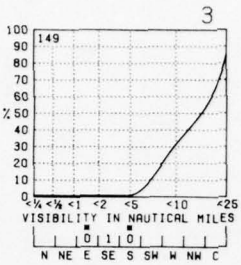
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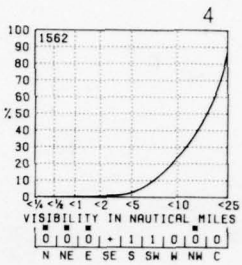
nautical miles.)

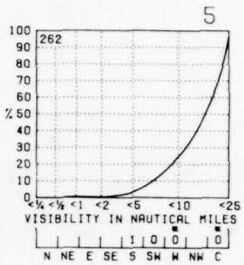
VISIBILITY

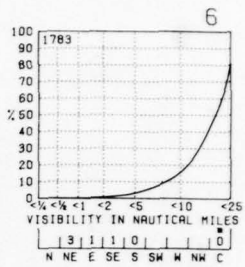


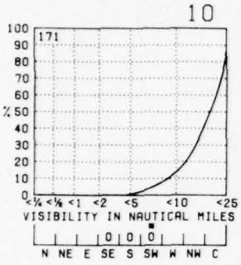


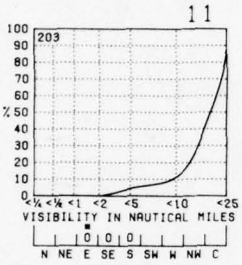


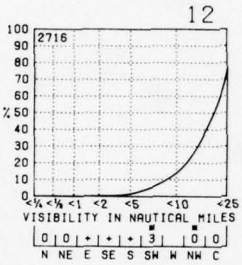


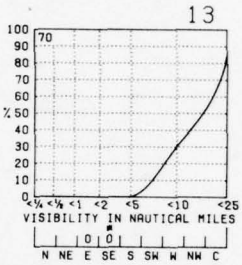


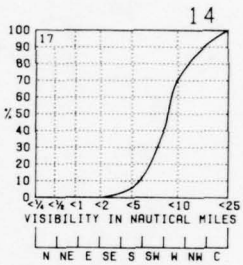


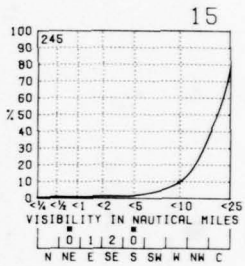


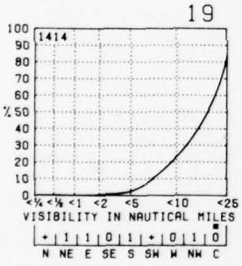


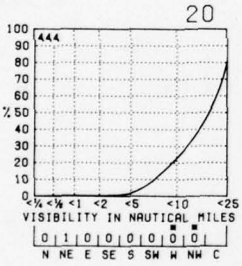


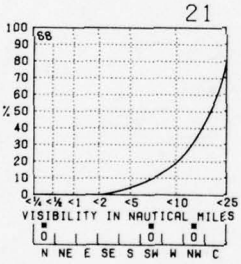


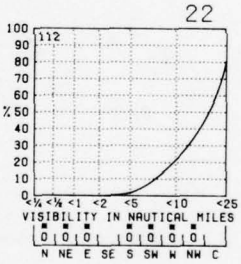


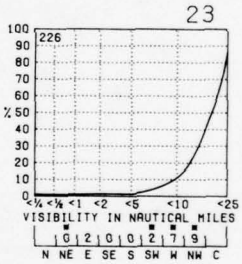


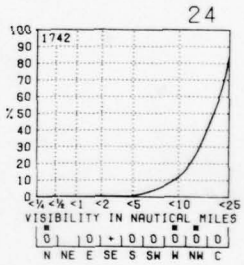


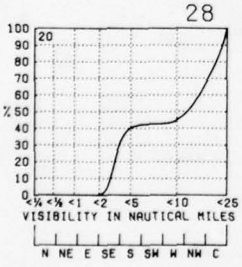


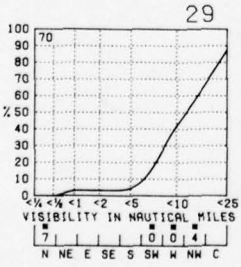


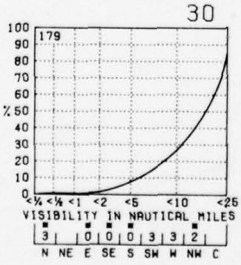


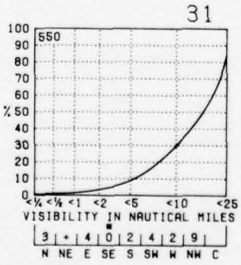


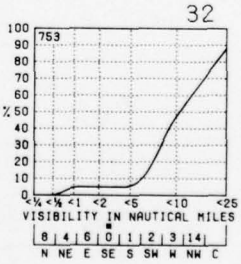


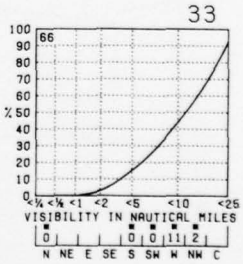






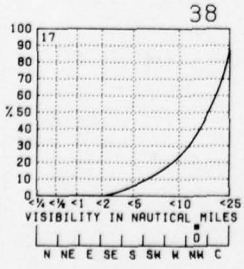






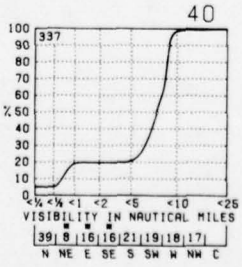
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INSUFFICIENT DATA



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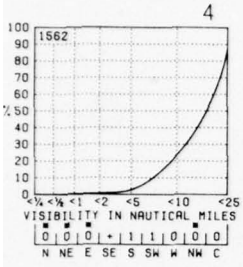
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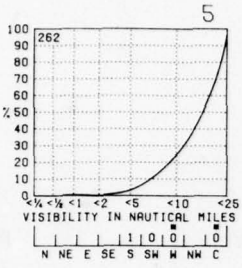
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JUNE

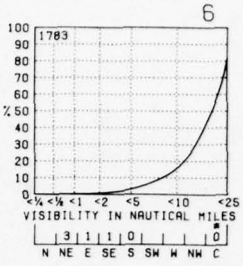
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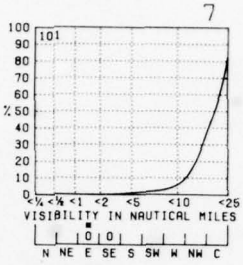
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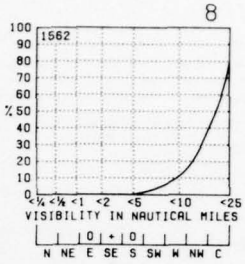
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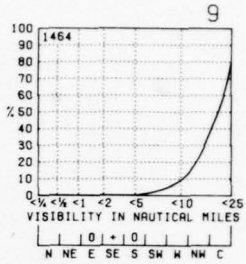
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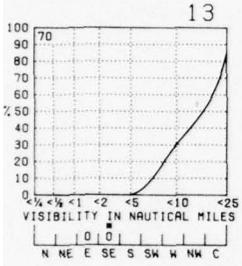
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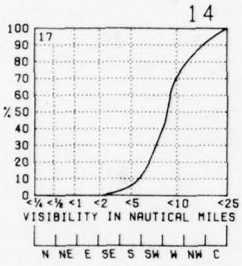
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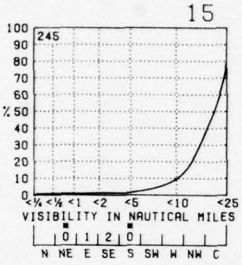
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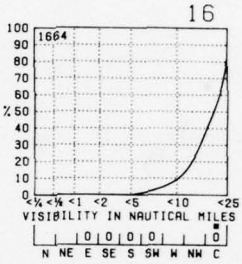
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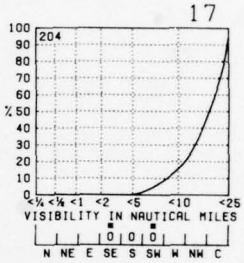
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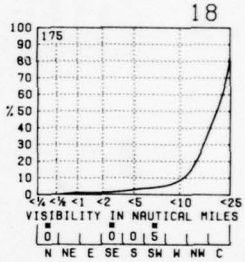
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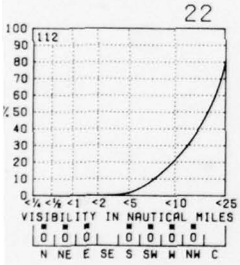
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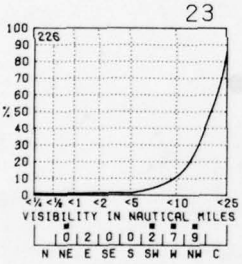
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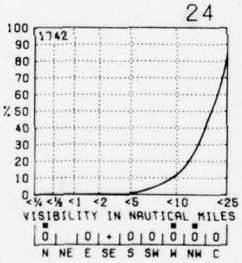
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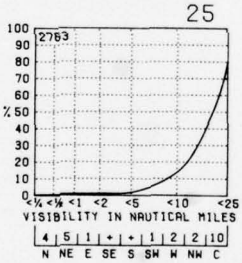
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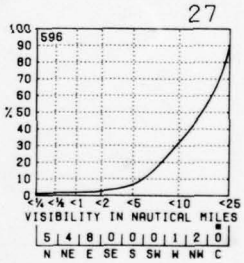
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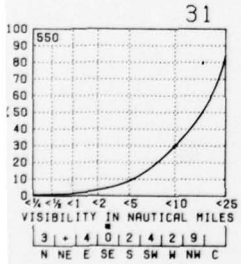
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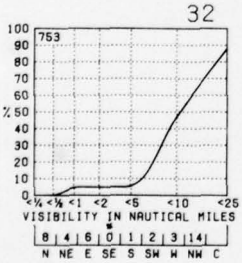
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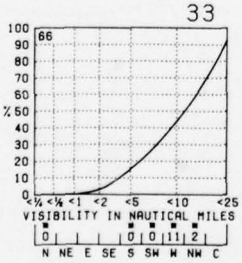
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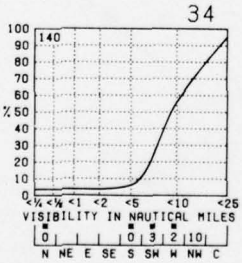
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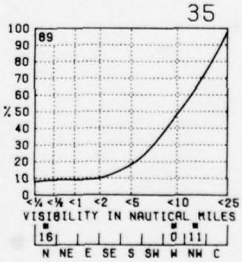
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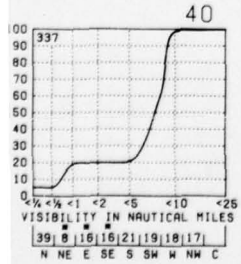
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INSUFFICIENT DATA

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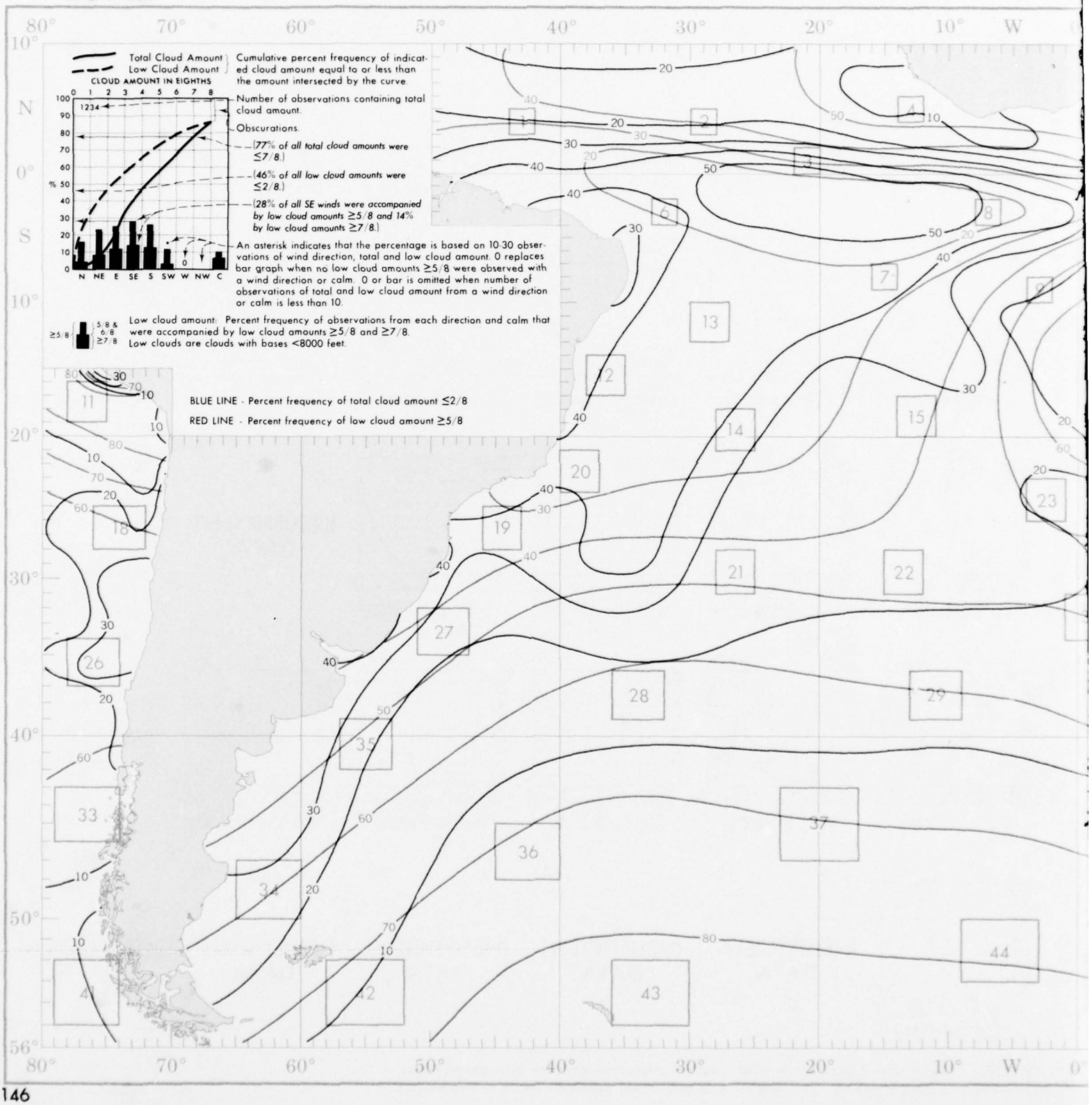
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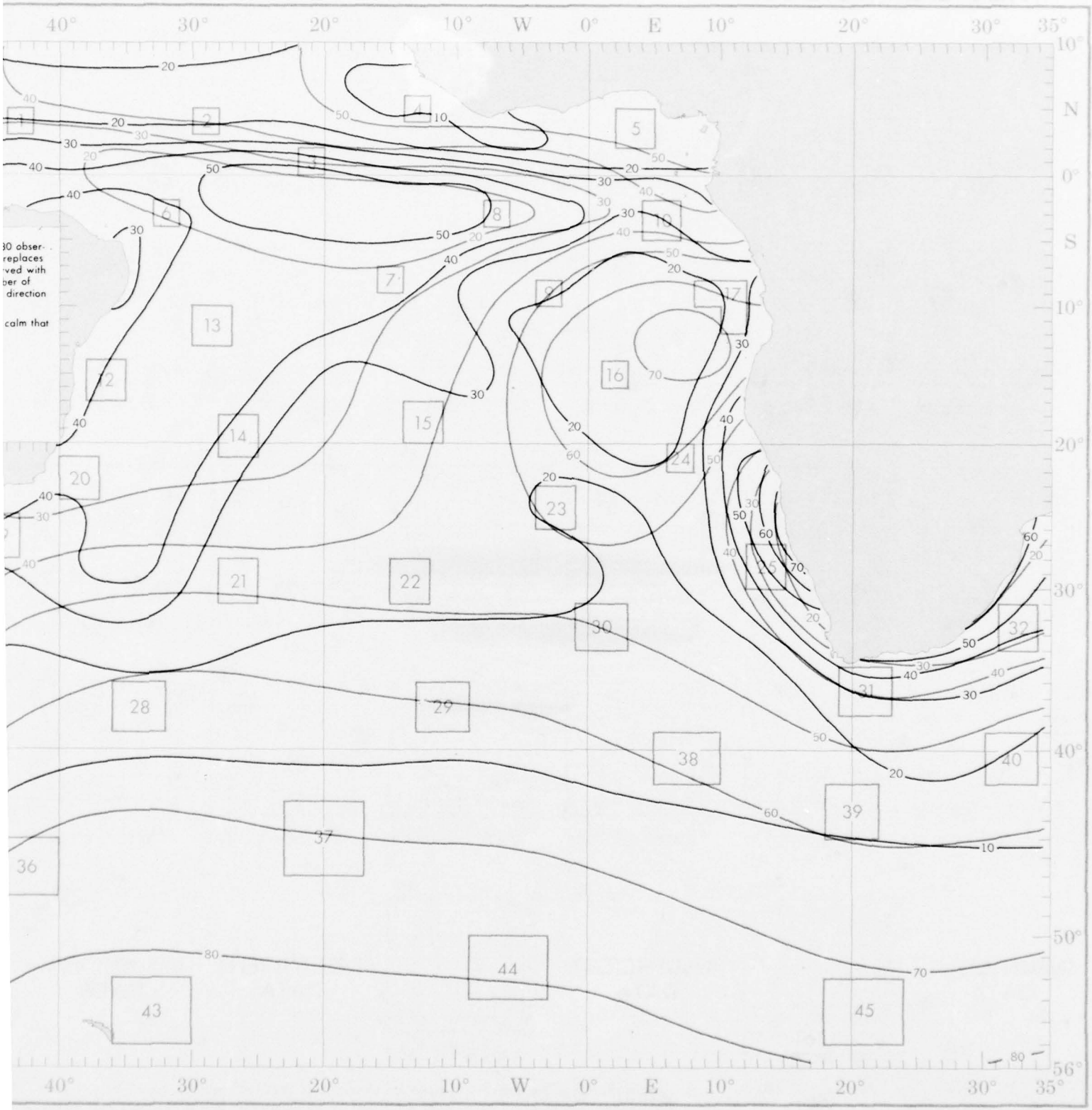
INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

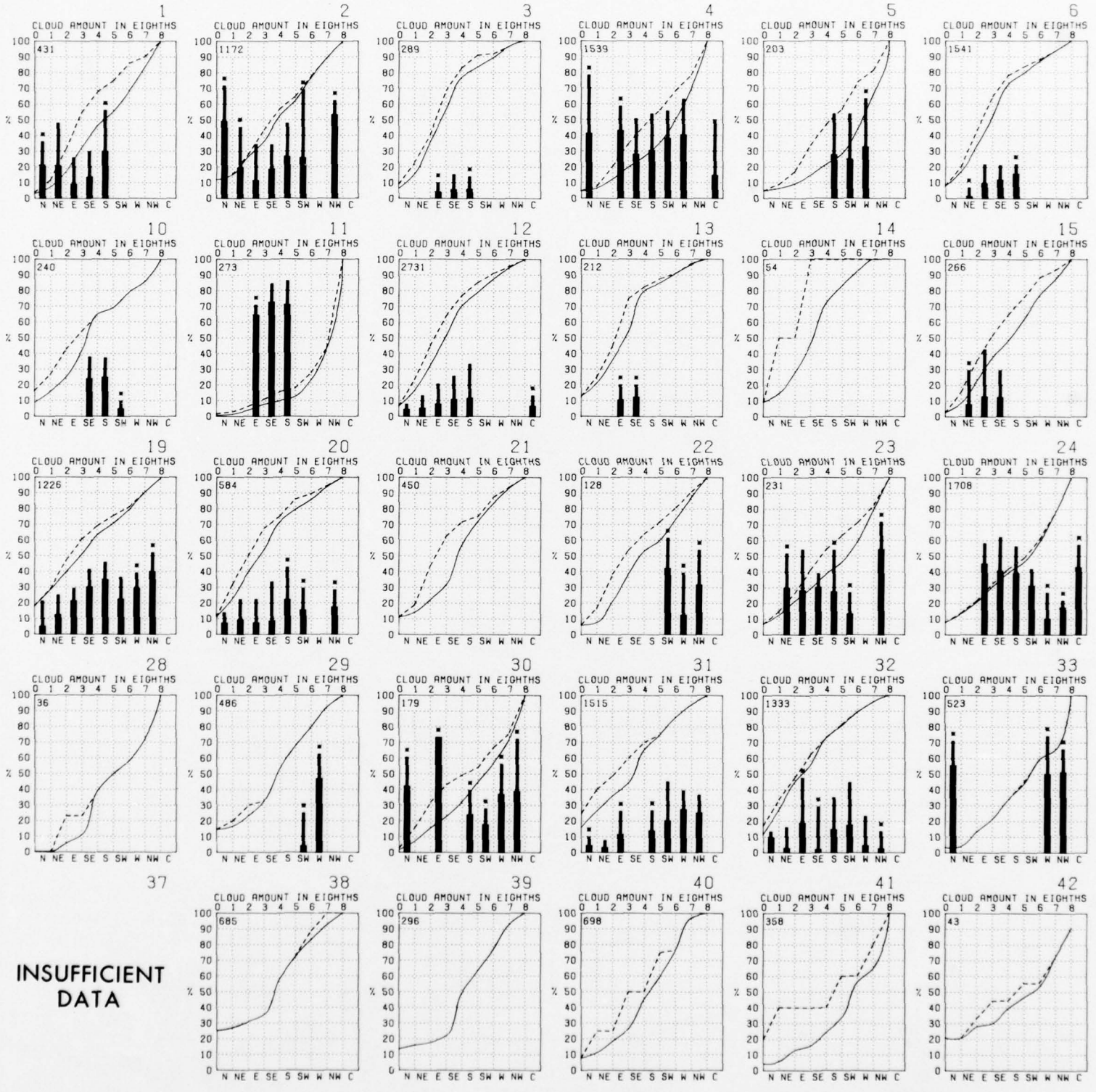
JUNE


Total Cloud Amount
Low Cloud Amount
CLOUD AMOUNT IN EIGHTHS
Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.
Number of observations containing total cloud amount.
Obscurations.
(77% of all total cloud amounts were ≤7/8.)
(46% of all low cloud amounts were ≤2/8.)
(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)
An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.
≥5/8
5/8 & 6/8
≥7/8
Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.
BLUE LINE - Percent frequency of total cloud amount ≤2/8
RED LINE - Percent frequency of low cloud amount ≥5/8
N NE E SE S SW W NW C
80° 70° 60° 50° 40° 30° 20° 10° W
10° N 0° S 10° 20° 30° 40° 50° 56°

CLOUD COVER


40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 40 30 50 10 60 70 80
30 obser- replaces ved with ber of direction
calm that

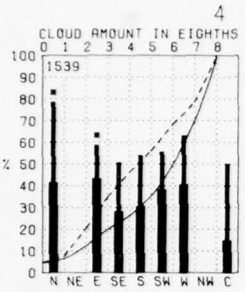
CLOUD COVER

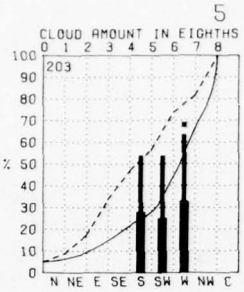


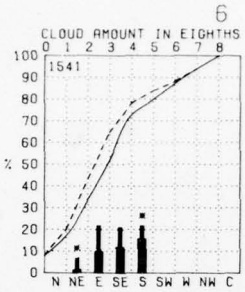
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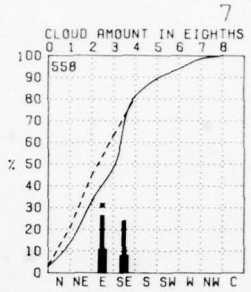
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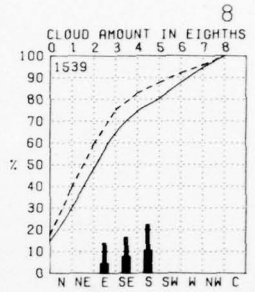
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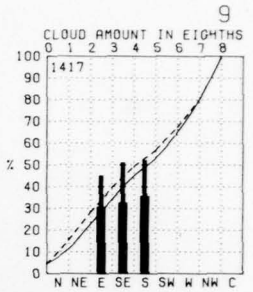


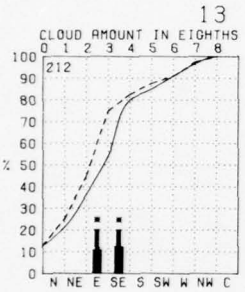


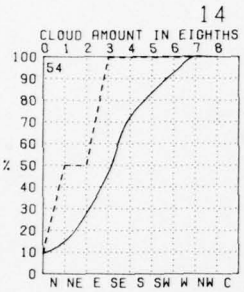


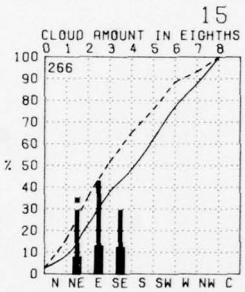


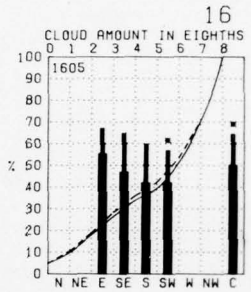


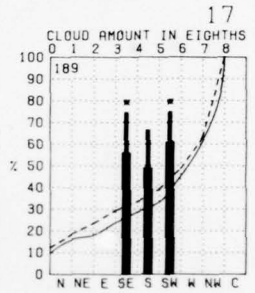


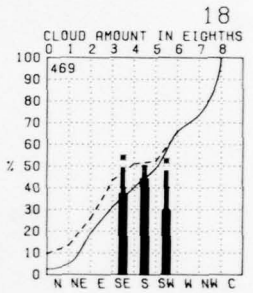


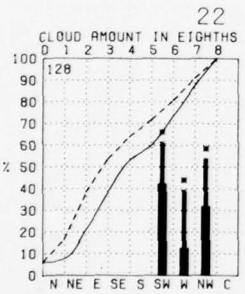


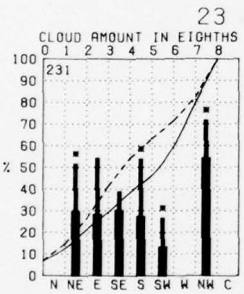


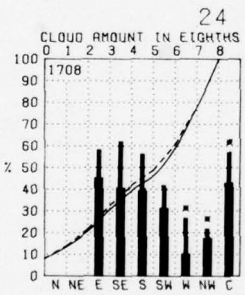


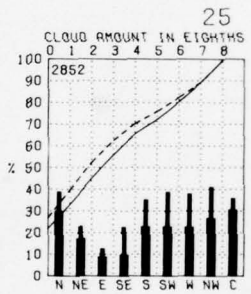


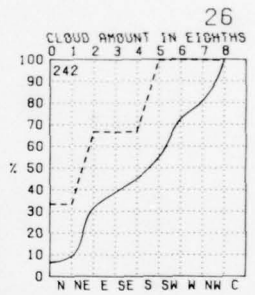


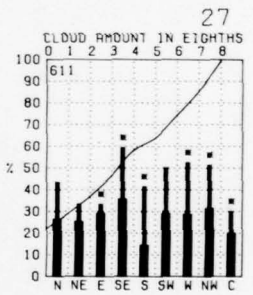


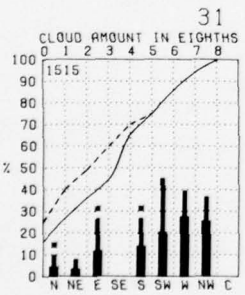


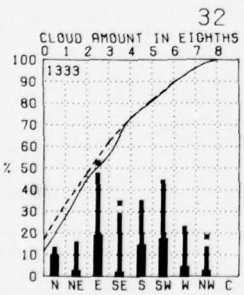


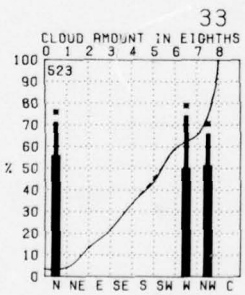


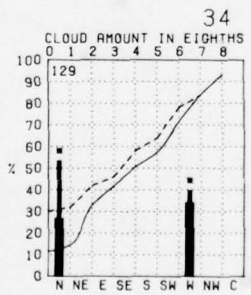


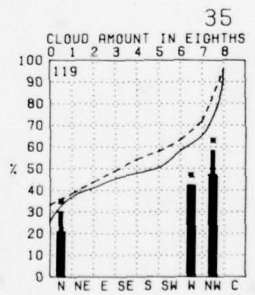






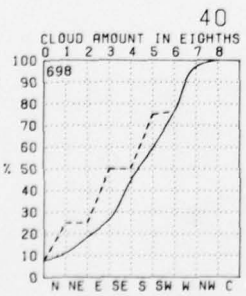


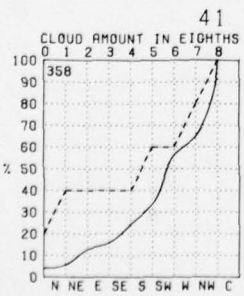


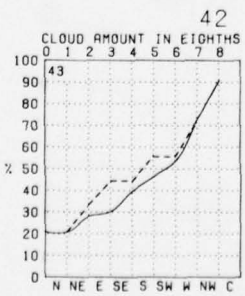


36

INSUFFICIENT DATA







43

INSUFFICIENT DATA

44

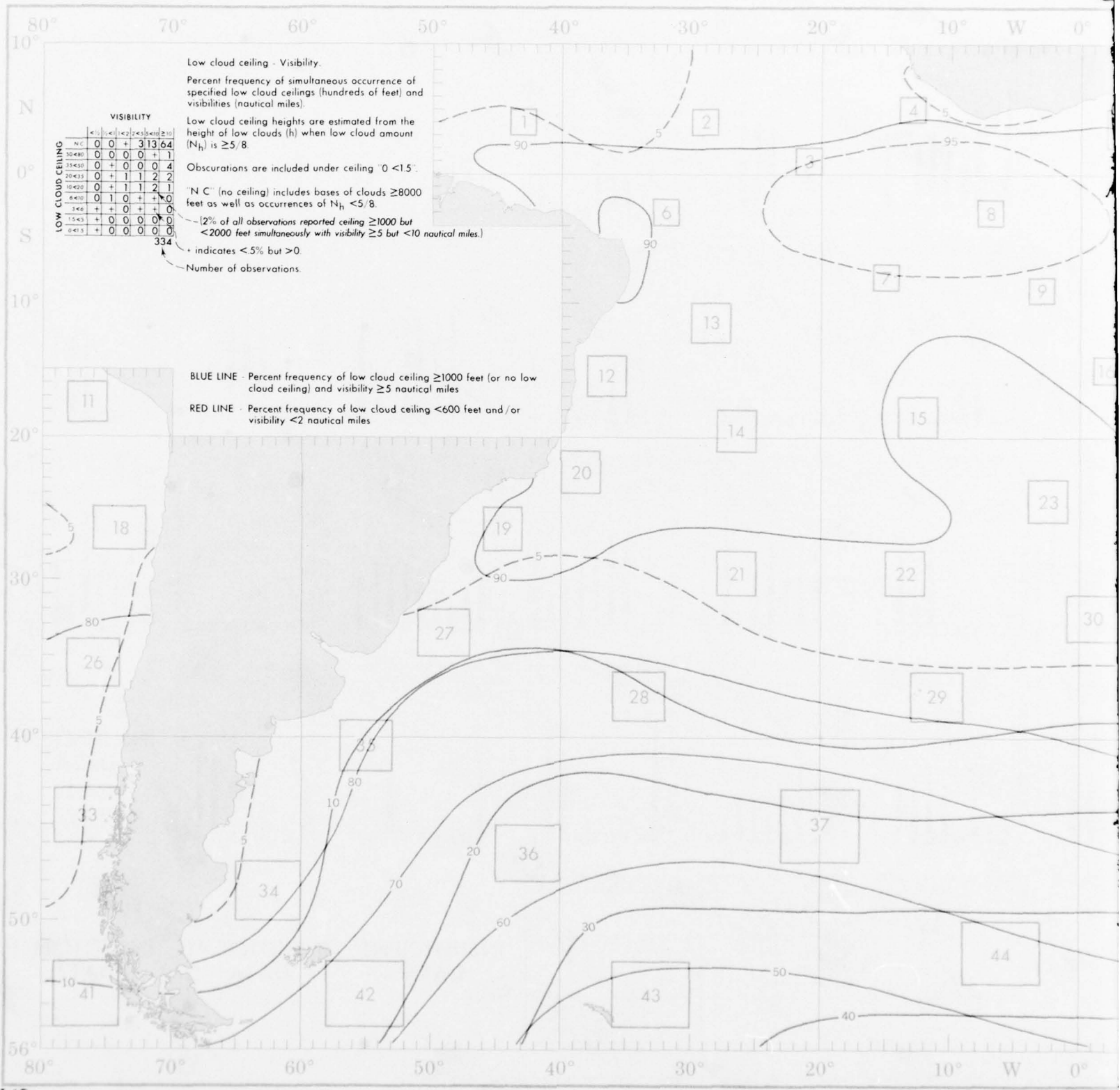
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
VISIBILITY
LOW CLOUD CEILING
N C 0 0 + 3 13 64
30<80 0 0 0 0 + 1
35<50 0 + 0 0 0 4
20<35 0 + 1 1 2 2
10<20 0 + 1 1 2 1
6<10 0 1 0 + + 0
3<6 + + 0 + + 0
1.5<3 + 0 0 0 0 0
0<1.5 + 0 0 0 0 0
334
[2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates <.5% but >0.
Number of observations.
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 11 12 13 14 15 18 19 20 21 22 23 26 27 28 29 30 33 34 36 37 41 42 43 44
5 90 95 80 10 70 60 30 50 40

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	64
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	0	0	1	3
10<20	0	0	0	1	3	9
6<10	0	0	+	+	3	5
3<6	+	0	0	+	+	1
1.5<3	0	0	0	0	+	1
0<1.5	0	0	0	0	0	0

344

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	55
50<80	0	0	0	0	0	2
35<50	0	0	0	+	1	2
20<35	0	0	0	+	2	6
10<20	+	0	0	1	3	14
6<10	0	0	0	1	1	5
3<6	0	0	0	0	+	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

310

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	80
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	2
10<20	0	0	0	0	1	6
6<10	0	0	0	0	2	2
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

87

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	47
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	1	9
10<20	0	0	0	+	3	19
6<10	0	0	+	1	2	8
3<6	+	0	0	+	1	1
1.5<3	0	0	0	+	+	+
0<1.5	0	0	0	0	+	+

1092

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	45
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	9
10<20	0	0	0	1	7	17
6<10	0	0	0	0	3	8
3<6	0	0	0	1	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

150

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	77
50<80	0	0	0	0	+	+
35<50	0	0	0	+	1	2
20<35	0	0	0	0	+	3
10<20	0	0	0	+	1	6
6<10	0	0	0	1	2	3
3<6	0	+	0	0	0	1
1.5<3	0	0	0	0	0	+
0<1.5	+	0	0	0	0	0

558

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	5	58
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	1	7
10<20	0	0	0	0	3	14
6<10	0	0	0	0	3	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

147

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	1	14
50<80	0	0	0	0	1	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	22
10<20	0	0	0	1	3	43
6<10	0	0	0	0	0	11
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	1	1
0<1.5	0	0	0	1	0	0

161

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	75
50<80	0	0	0	0	0	1
35<50	0	0	0	+	1	2
20<35	0	+	0	0	+	4
10<20	0	0	0	+	1	7
6<10	0	0	0	+	1	3
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1320

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	79
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	3
10<20	0	0	0	0	0	3
6<10	0	0	0	0	3	8
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

39

INSUFFICIENT DATA

14

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	61
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	7
10<20	0	0	0	0	2	14
6<10	0	0	1	0	1	8
3<6	0	0	0	1	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

188

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	66
50<80	0	0	0	0	2	1
35<50	0	0	+	0	1	1
20<35	0	0	0	+	2	4
10<20	0	0	0	+	1	8
6<10	0	0	0	+	3	5
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	0

393

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	11	62
50<80	0	0	0	0	+	0
35<50	0	0	0	0	1	3
20<35	0	0	0	0	2	2
10<20	0	0	0	+	1	10
6<10	0	0	0	0	+	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

209

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	7
10<20	0	0	0	0	7	10
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

30

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	66
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	8
10<20	0	0	0	0	1	8
6<10	0	0	0	0	4	5
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

73

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	2	53
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	6
10<20	0	0	0	0	1	22
6<10	0	0	0	0	2	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	1	1

178

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	40
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	16
10<20	+	0	0	0	2	24
6<10	0	0	+	0	1	6
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	+	0

1370

28

INSUFFICIENT DATA

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	51
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	4
10<20	0	0	0	0	2	13
6<10	0	0	0	0	0	16
3<6	0	0	0	2	4	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	2	0

45

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	2	48
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	7
20<35	0	0	0	0	3	5
10<20	0	0	0	0	0	20
6<10	0	0	1	1	2	10
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

107

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	3	65
50<80	0	0	+	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	2	4
10<20	0	0	0	1	2	10
6<10	0	0	0	1	2	4
3<6	0	+	0	0	1	+
1.5<3	0	0	0	1	0	0
0<1.5	0	0	0	0	0	0

284

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	6	68
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	0	2	7
6<10	0	0	0	+	2	5
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

357

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	4	4	24
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	2	0	5
10<20	0	0	0	2	13	15
6<10	0	0	2	7	9	7
3<6	0	0	0	0	4	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	2	0	2	0

55

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

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40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

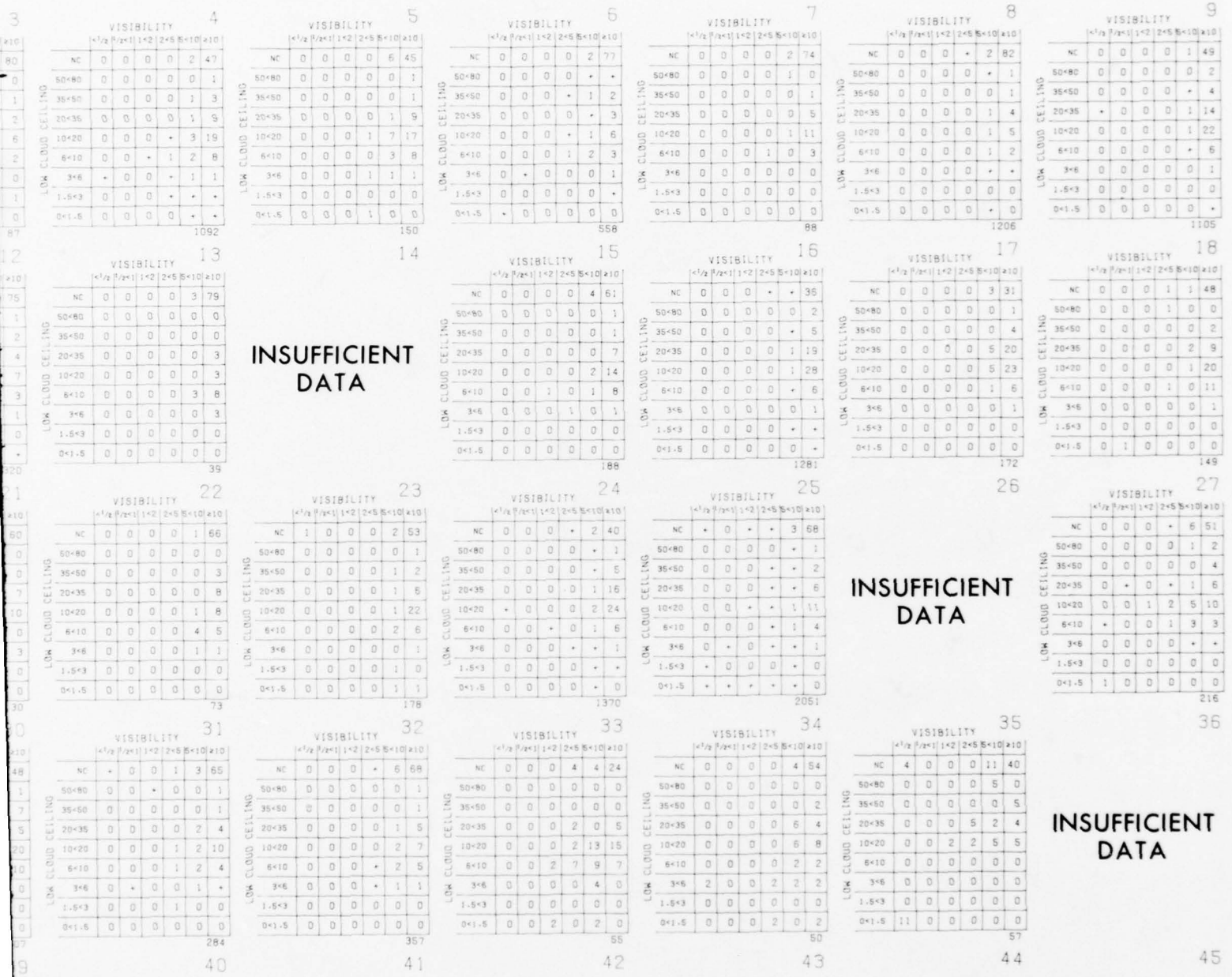
42

INSUFFICIENT DATA

IN

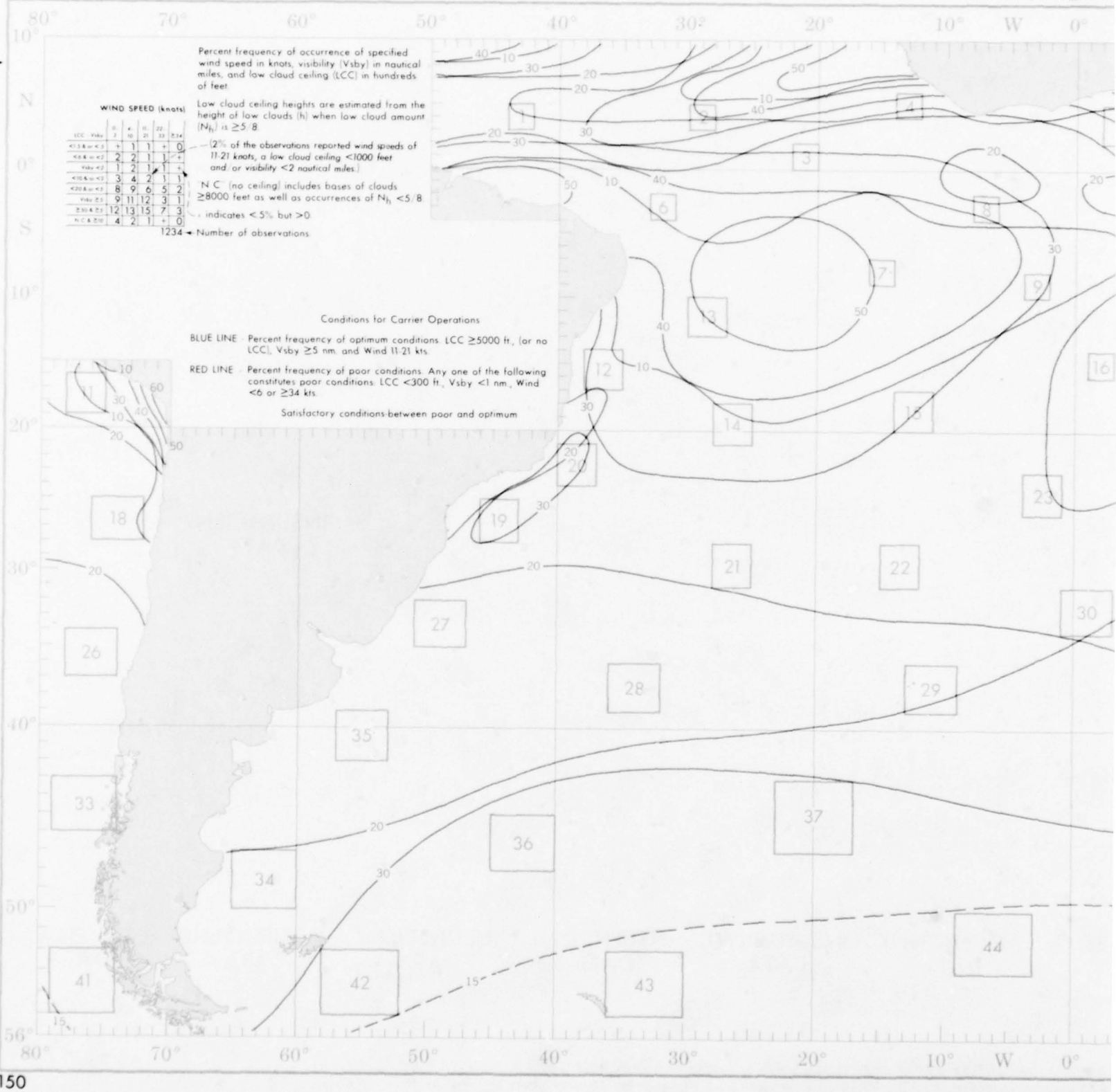
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

JUNE

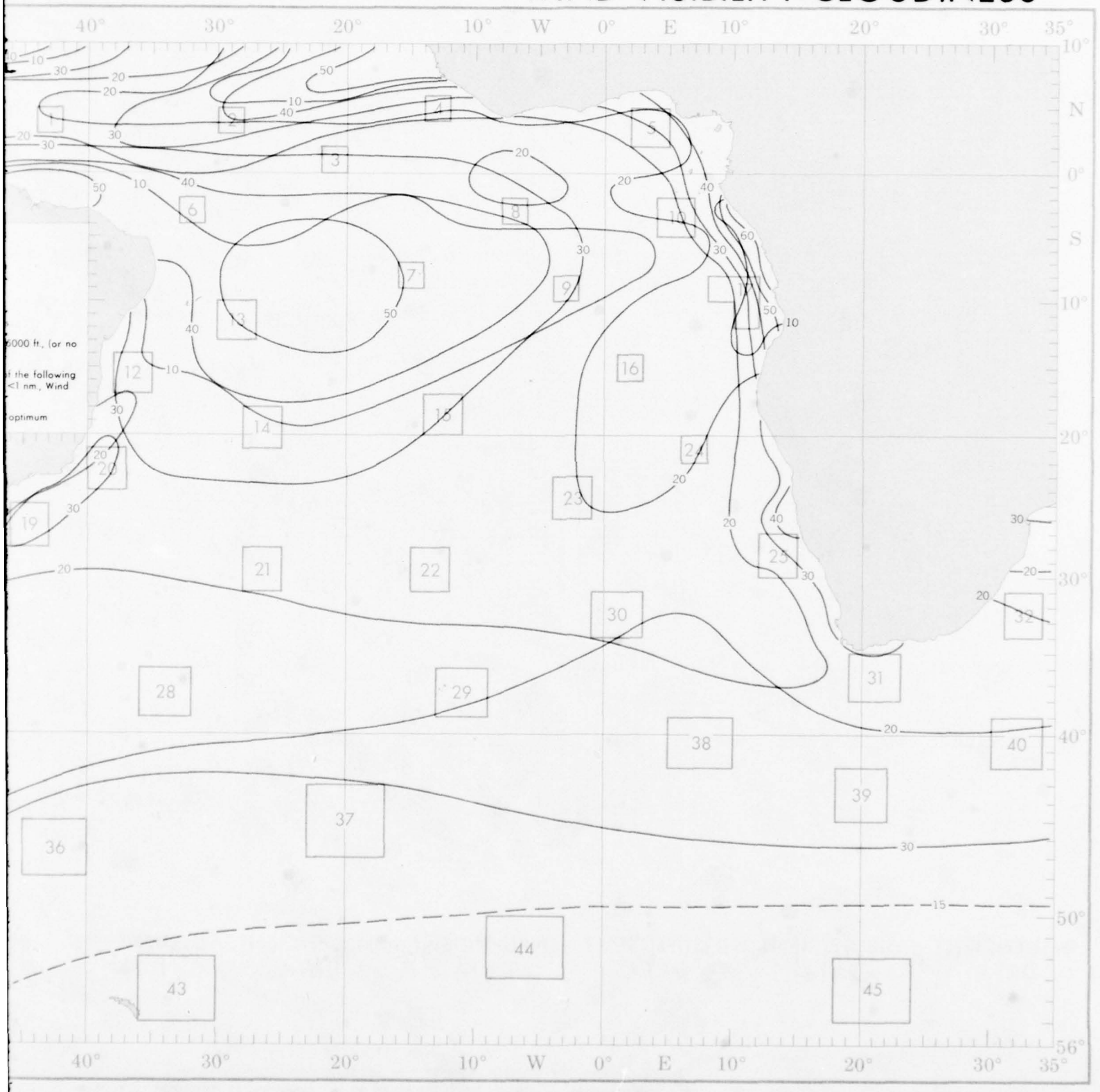


nt the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE


Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
WIND SPEED (knots)
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.
N.C. (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
indicates <.5% but >0.
1234 ← Number of observations.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions: LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm, and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions: Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions between poor and optimum
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	5	6	+	0
<20 & OR <5	2	12	10	+	0
VSBY ≥5	10	55	32	1	0
≥50 & ≥5	7	40	22	0	0
NC & ≥10	6	38	19	0	0

339

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	2	2	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	7	3	0	0
<20 & OR <5	3	19	8	0	0
VSBY ≥5	10	60	26	1	0
≥50 & ≥5	6	36	17	1	0
NC & ≥10	5	34	15	1	0

305

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	2	0	0
<20 & OR <5	1	9	3	0	0
VSBY ≥5	6	59	36	0	0
≥50 & ≥5	5	48	30	0	0
NC & ≥10	5	47	29	0	0

87

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	6	6	+	0
<20 & OR <5	2	18	16	1	0
VSBY ≥5	8	50	39	1	0
≥50 & ≥5	5	26	18	1	0
NC & ≥10	5	24	17	1	0

1080

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	8	5	1	0
<20 & OR <5	1	17	17	2	0
VSBY ≥5	5	51	39	3	0
≥50 & ≥5	4	27	20	1	0
NC & ≥10	4	23	17	0	0

150

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	4	3	0	0
<20 & OR <5	+	7	8	0	0
VSBY ≥5	2	46	49	1	0
≥50 & ≥5	2	38	39	1	0
NC & ≥10	2	38	37	1	0

557

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	3	0	0
<20 & OR <5	2	16	7	0	0
VSBY ≥5	5	72	22	0	0
≥50 & ≥5	3	47	13	0	0
NC & ≥10	2	44	12	0	0

147

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	2	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	6	6	2	0
<20 & OR <5	2	24	32	4	0
VSBY ≥5	5	43	46	4	0
≥50 & ≥5	2	8	5	1	0
NC & ≥10	1	7	5	0	0

161

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	+	0
<10 & OR <2	0	2	3	1	0
<20 & OR <5	+	6	7	1	0
VSBY ≥5	5	49	41	4	+
≥50 & ≥5	4	40	31	3	+
NC & ≥10	4	39	30	3	+

1315

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	13	0	0
<20 & OR <5	0	3	13	0	0
VSBY ≥5	5	33	51	10	0
≥50 & ≥5	5	28	38	10	0
NC & ≥10	5	26	38	10	0

39

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	2	7	0	0
<20 & OR <5	1	9	15	1	0
VSBY ≥5	6	39	46	8	0
≥50 & ≥5	4	27	29	5	0
NC & ≥10	4	25	27	5	0

188

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	2	6	1	0
<20 & OR <5	1	7	11	1	0
VSBY ≥5	6	39	46	6	1
≥50 & ≥5	5	31	33	4	+
NC & ≥10	5	29	29	3	+

389

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	0	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	0	3	2	0	0
<20 & OR <5	1	9	7	+	0
VSBY ≥5	2	46	45	5	0
≥50 & ≥5	1	34	34	4	0
NC & ≥10	1	31	28	2	0

206

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	3	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	0	0	0
<20 & OR <5	0	10	7	3	0
VSBY ≥5	7	43	40	10	0
≥50 & ≥5	3	27	33	7	0
NC & ≥10	3	23	30	3	0

30

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	8	0	0
<20 & OR <5	0	8	13	1	0
VSBY ≥5	11	38	46	4	1
≥50 & ≥5	11	22	32	1	0
NC & ≥10	11	22	31	1	0

72

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	1	7	2	1	0
<20 & OR <5	1	16	15	3	0
VSBY ≥5	6	44	40	10	0
≥50 & ≥5	5	24	20	6	0
NC & ≥10	5	23	20	5	0

177

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	+	1	+	+
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	5	1	+
<20 & OR <5	2	10	18	4	+
VSBY ≥5	7	36	47	8	1
≥50 & ≥5	3	20	18	2	+
NC & ≥10	3	18	17	2	0

1360

28

INSUFFICIENT DATA

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	0
<6 & OR <2	0	7	0	2	0
VSBY <2	0	0	0	0	0
<10 & OR <2	4	9	9	2	0
<20 & OR <5	4	20	11	4	0
VSBY ≥5	9	33	42	11	2
≥50 & ≥5	4	11	29	9	2
NC & ≥10	4	11	24	9	2

45

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	1	1	0	0
<10 & OR <2	0	5	7	2	2
<20 & OR <5	0	12	17	4	2
VSBY ≥5	1	50	38	6	3
≥50 & ≥5	0	30	18	2	0
NC & ≥10	0	29	18	0	0

105

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	+	+	1	1	1
VSBY <2	+	+	+	0	0
<10 & OR <2	+	3	3	2	2
<20 & OR <5	1	5	10	4	3
VSBY ≥5	8	34	38	13	3
≥50 & ≥5	7	28	25	9	1
NC & ≥10	7	26	24	8	1

280

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	+	2
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	3	4
<20 & OR <5	0	3	5	5	6
VSBY ≥5	5	27	34	22	11
≥50 & ≥5	5	24	26	16	4
NC & ≥10	4	23	24	13	3

353

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	2	0
<6 & OR <2	0	2	4	4	0
VSBY <2	0	0	2	2	0
<10 & OR <2	0	5	9	16	2
<20 & OR <5	0	15	31	20	2
VSBY ≥5	0	25	42	15	0
≥50 & ≥5	0	11	16	0	0
NC & ≥10	0	9	15	0	0

55

37 38 39 40 41 42

INSUFFICIENT DATA **INSUFFICIENT DATA** **INSUFFICIENT DATA** **INSUFFICIENT DATA** **INSUFFICIENT DATA** **INSUFFICIENT DATA** **INSU**

Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	6	6	+	0
<20 & OR <5	2	18	16	1	0
VSBY ≥5	8	50	39	1	0
≥50 & ≥5	5	26	18	1	0
NC & ≥10	5	24	17	1	0

1080

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	8	5	1	0
<20 & OR <5	1	17	17	2	0
VSBY ≥5	5	51	39	3	0
≥50 & ≥5	4	27	20	1	0
NC & ≥10	4	23	17	0	0

150

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	4	3	0	0
<20 & OR <5	+	7	8	0	0
VSBY ≥5	2	46	49	1	0
≥50 & ≥5	2	38	39	1	0
NC & ≥10	2	38	37	1	0

557

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	5	0	0
<20 & OR <5	0	3	13	1	0
VSBY ≥5	1	27	60	10	0
≥50 & ≥5	1	23	45	8	0
NC & ≥10	1	22	43	8	0

88

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	2	+	0
<20 & OR <5	+	4	4	+	0
VSBY ≥5	2	52	46	1	0
≥50 & ≥5	2	45	38	+	0
NC & ≥10	2	43	37	+	0

1202

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	3	4	+	0
<20 & OR <5	0	9	19	1	0
VSBY ≥5	1	34	62	3	0
≥50 & ≥5	1	19	31	1	0
NC & ≥10	1	18	29	1	0

1102

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	13	0	0
<20 & OR <5	0	3	13	0	0
VSBY ≥5	5	33	51	10	0
≥50 & ≥5	5	28	38	10	0
NC & ≥10	5	26	38	10	0

39

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	2	7	0	0
<20 & OR <5	1	9	15	1	0
VSBY ≥5	6	39	46	8	0
≥50 & ≥5	4	27	29	5	0
NC & ≥10	4	25	27	5	0

188

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	4	+	0
<20 & OR <5	1	16	18	2	+
VSBY ≥5	5	46	45	4	+
≥50 & ≥5	3	18	16	2	0
NC & ≥10	3	17	15	2	0

1276

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	3	0	0
<20 & OR <5	2	19	14	1	0
VSBY ≥5	9	62	27	1	0
≥50 & ≥5	5	23	7	0	0
NC & ≥10	3	21	7	0	0

172

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	1	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	1	1	0	0	0
<10 & OR <2	1	9	4	0	0
<20 & OR <5	3	24	9	0	0
VSBY ≥5	11	47	32	5	1
≥50 & ≥5	8	18	17	5	1
NC & ≥10	7	18	17	5	1

148

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	8	0	0
<20 & OR <5	0	8	13	1	0
VSBY ≥5	11	38	46	4	1
≥50 & ≥5	11	22	32	1	0
NC & ≥10	11	22	31	1	0

72

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	1	7	2	1	0
<20 & OR <5	1	16	15	3	0
VSBY ≥5	6	44	40	10	0
≥50 & ≥5	5	24	20	6	0
NC & ≥10	5	23	20	5	0

177

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	+	1	+	+
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	5	1	+
<20 & OR <5	2	10	18	4	+
VSBY ≥5	7	36	47	8	1
≥50 & ≥5	3	20	18	2	+
NC & ≥10	3	18	17	2	0

1360

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	1	+	1	+	+
VSBY <2	+	+	+	0	0
<10 & OR <2	1	2	3	1	+
<20 & OR <5	2	7	8	2	+
VSBY ≥5	9	39	38	11	1
≥50 & ≥5	7	29	28	8	1
NC & ≥10	6	27	26	8	1

2039

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INSUFFICIENT DATA

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WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	1	0	0	0
<6 & OR <2	+	1	1	0	+
VSBY <2	+	1	+	0	+
<10 & OR <2	1	2	7	+	1
<20 & OR <5	2	7	11	7	2
VSBY ≥5	7	30	42	14	2
≥50 & ≥5	5	21	25	8	1
NC & ≥10	5	19	20	8	+

213

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	+	+	1	1	1
VSBY <2	+	+	+	0	0
<10 & OR <2	+	3	3	2	2
<20 & OR <5	1	5	10	4	3
VSBY ≥5	8	34	38	13	3
≥50 & ≥5	7	28	25	9	1
NC & ≥10	7	26	24	8	1

280

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	+	2
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	3	4
<20 & OR <5	0	3	5	5	6
VSBY ≥5	5	27	34	22	11
≥50 & ≥5	5	24	26	16	4
NC & ≥10	4	23	24	13	3

353

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	2	0
<6 & OR <2	0	2	4	4	0
VSBY <2	0	0	2	2	0
<10 & OR <2	0	5	9	16	2
<20 & OR <5	0	15	31	20	2
VSBY ≥5	0	25	42	15	0
≥50 & ≥5	0	11	16	0	0
NC & ≥10	0	9	15	0	0

55

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	4	0	2
<6 & OR <2	0	0	8	0	4
VSBY <2	0	0	0	0	2
<10 & OR <2	0	2	8	2	4
<20 & OR <5	0	4	16	4	6
VSBY ≥5	2	22	40	22	8
≥50 & ≥5	2	14	26	12	4
NC & ≥10	2	12	24	12	4

50

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	9	4	2	0	0
<6 & OR <2	9	5	2	0	0
VSBY <2	9	5	2	0	0
<10 & OR <2	9	5	2	0	0
<20 & OR <5	12	9	12	0	0
VSBY ≥5	11	30	33	4	0
≥50 & ≥5	11	21	21	4	0
NC & ≥10	9	16	12	4	0

57

36

INSUFFICIENT DATA

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INSUFFICIENT DATA

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INSUFFICIENT DATA

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INSUFFICIENT DATA

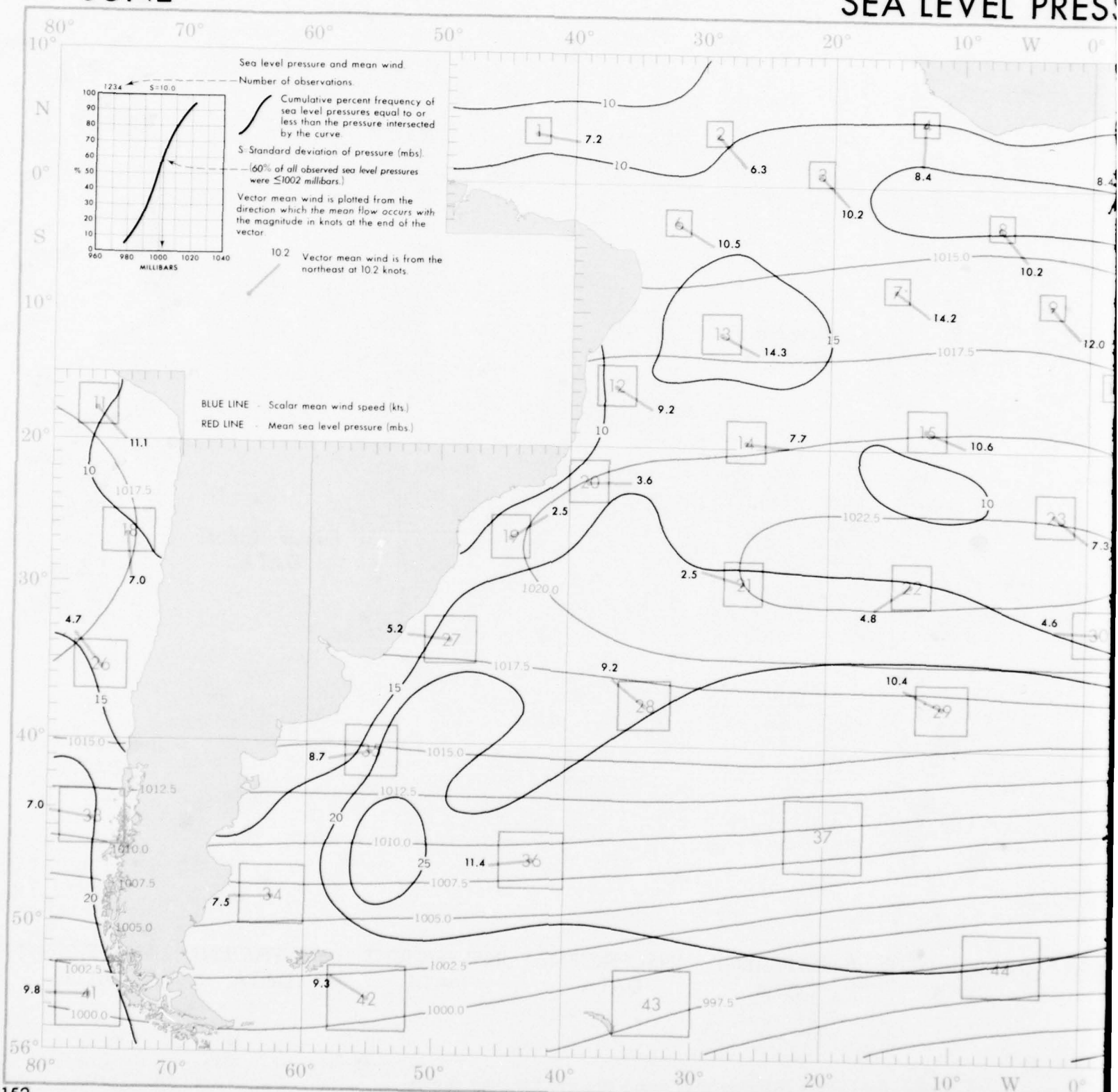
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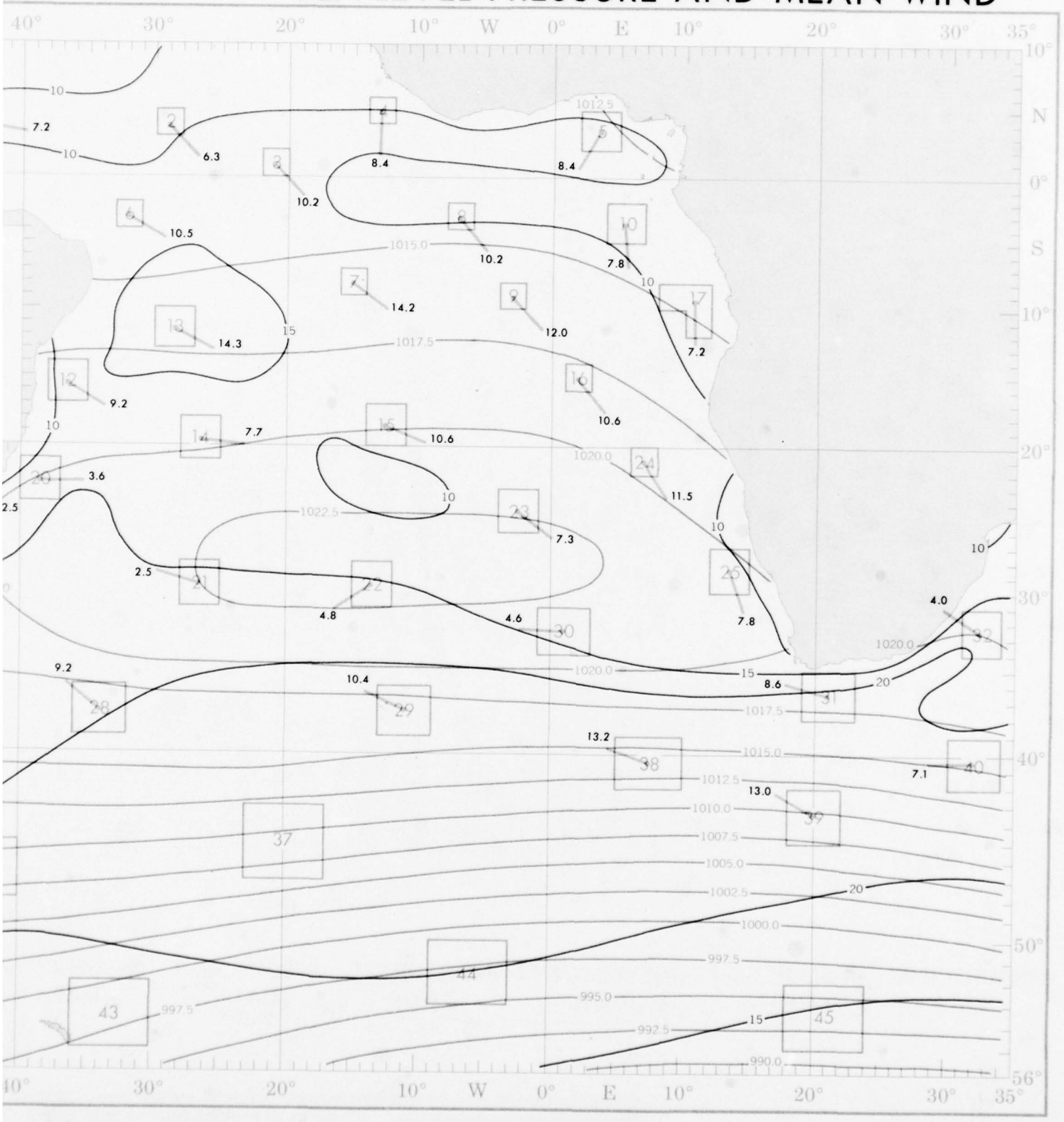
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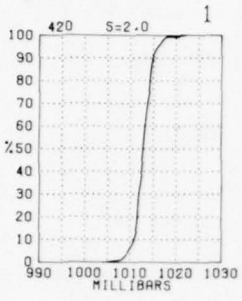
SEA LEVEL PRESS

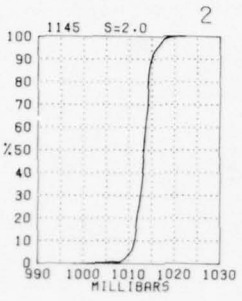


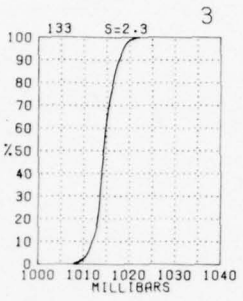
SEA LEVEL PRESSURE AND MEAN WIND

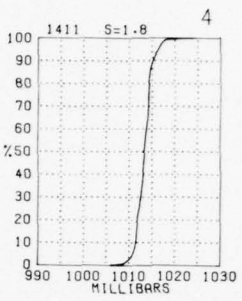


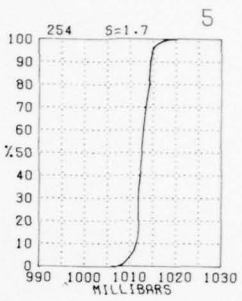
SEA LEVEL PRESSURE

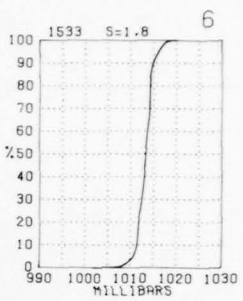


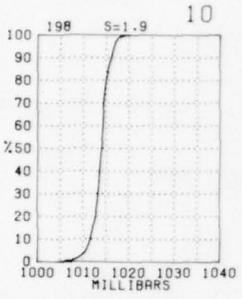


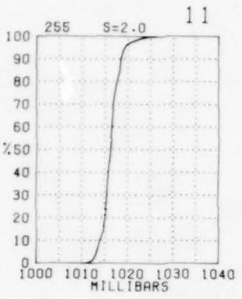


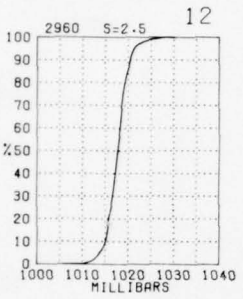


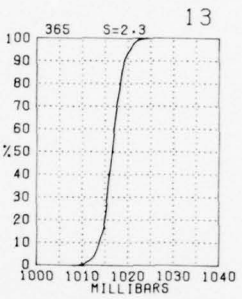


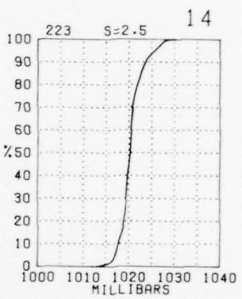


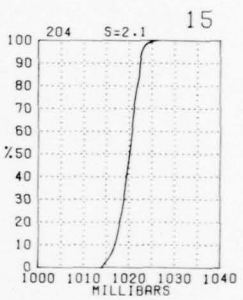


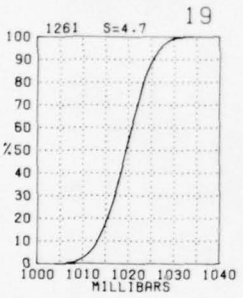


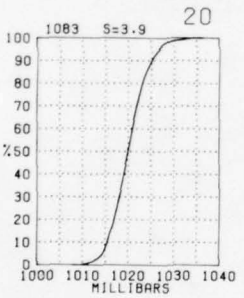


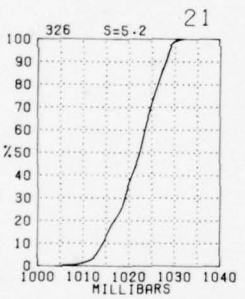


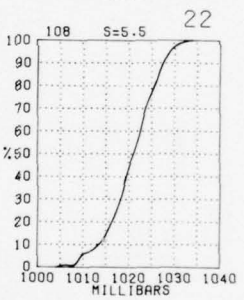


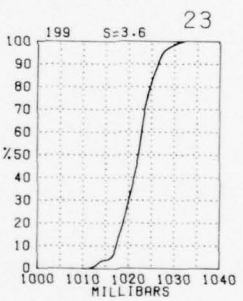


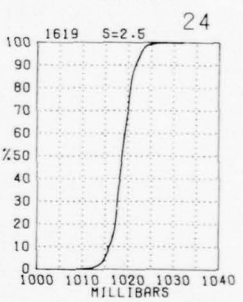


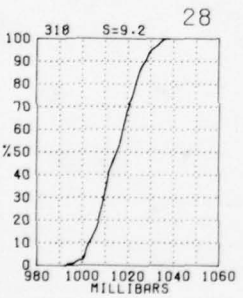


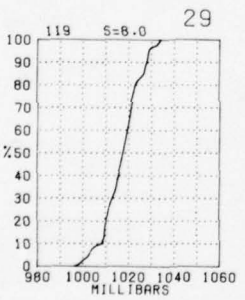


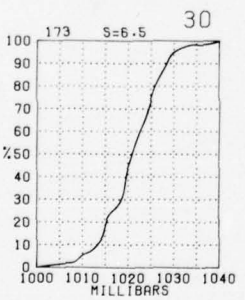


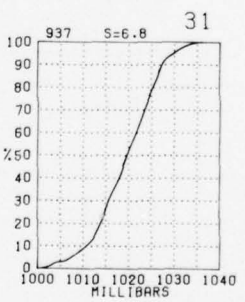


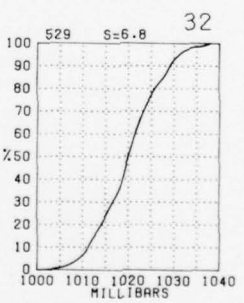


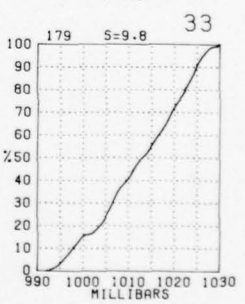






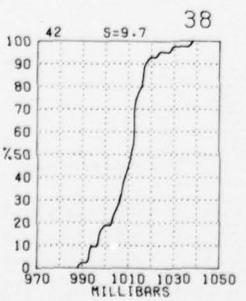


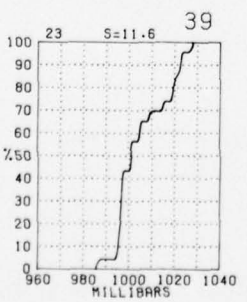


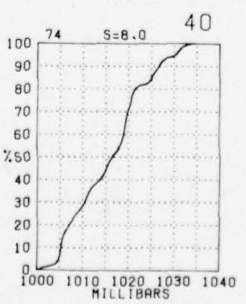


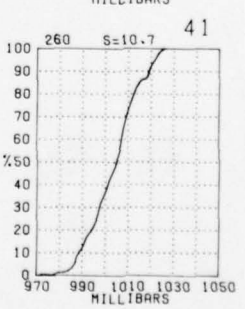
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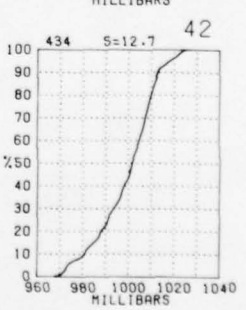
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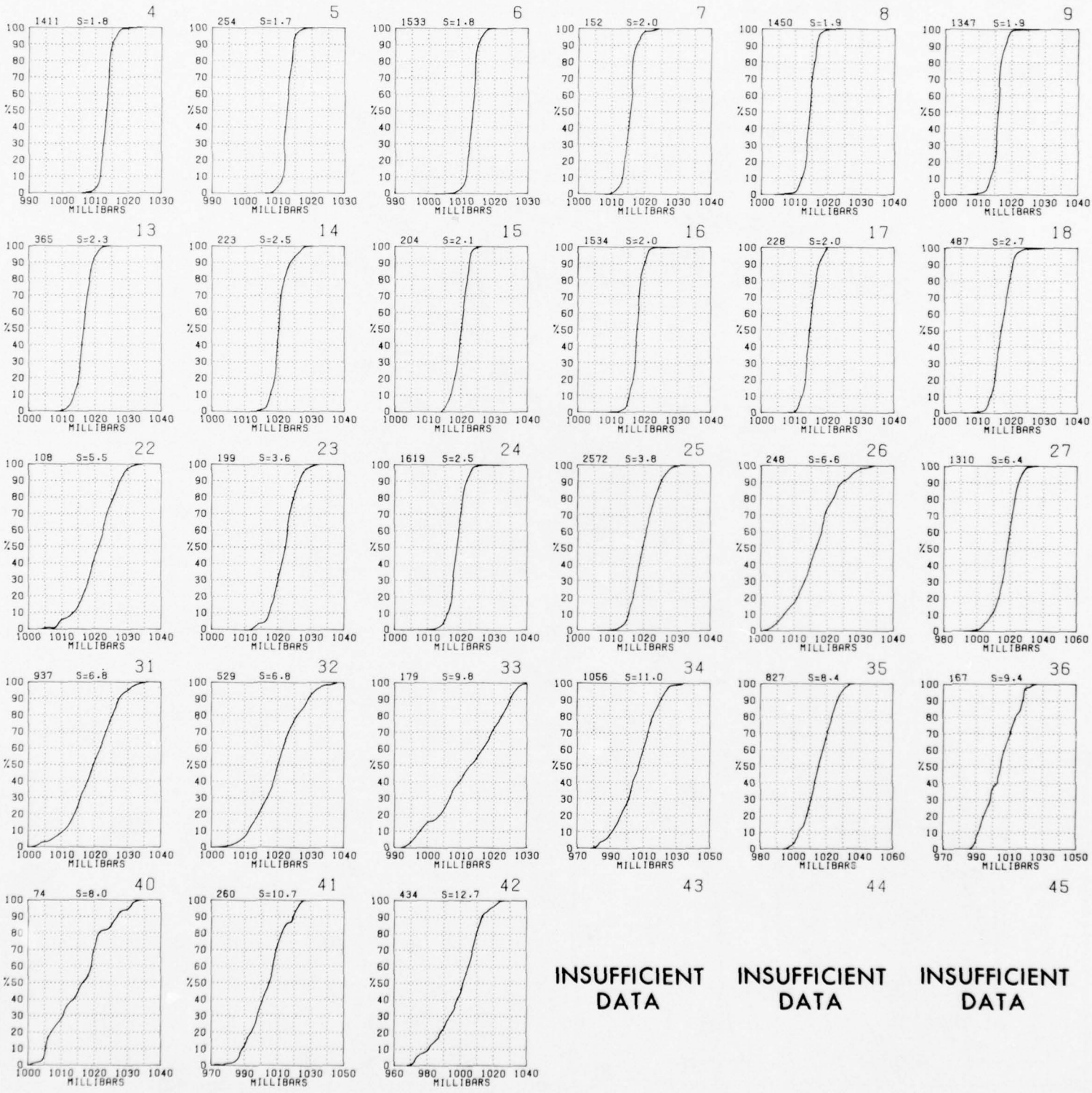




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Graphs represent the objective compilation of available data for specified areas without regard to suspec
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43

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44

INSUFFICIENT DATA

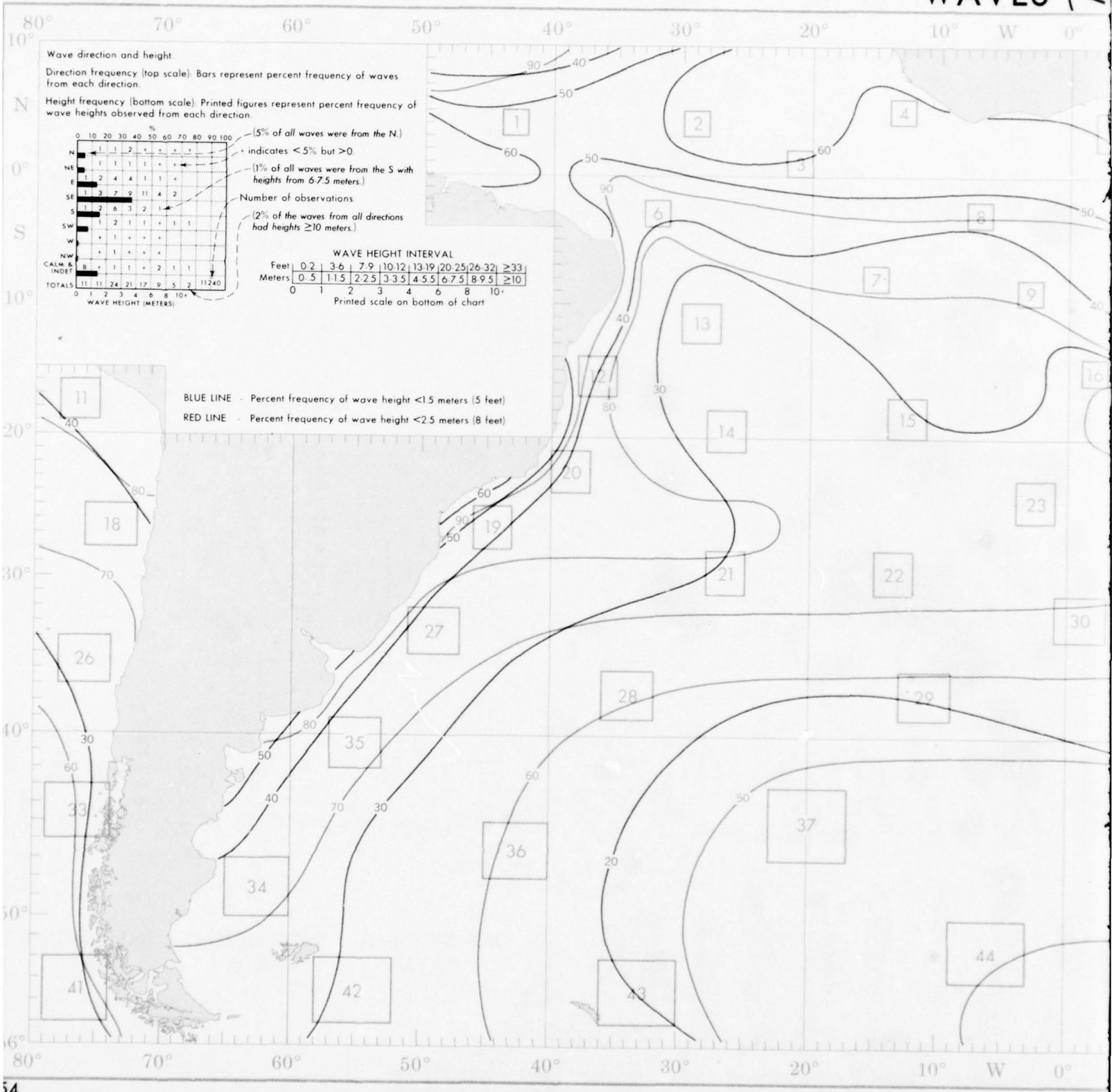
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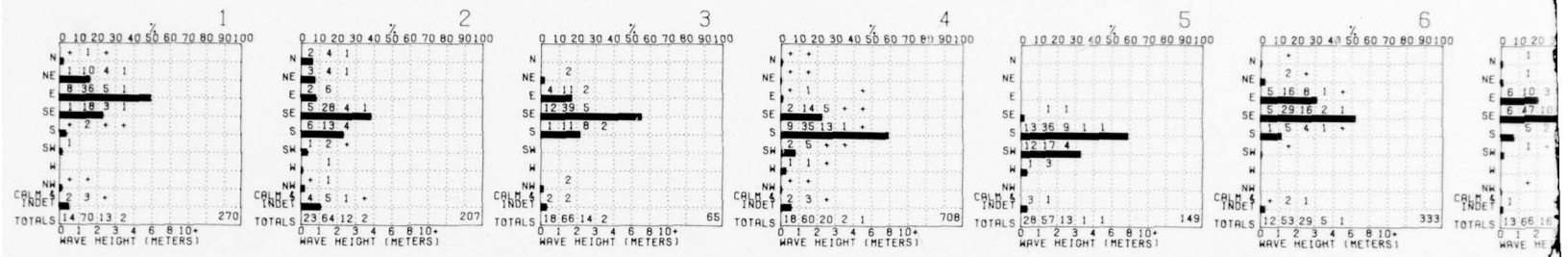
WAVES (<

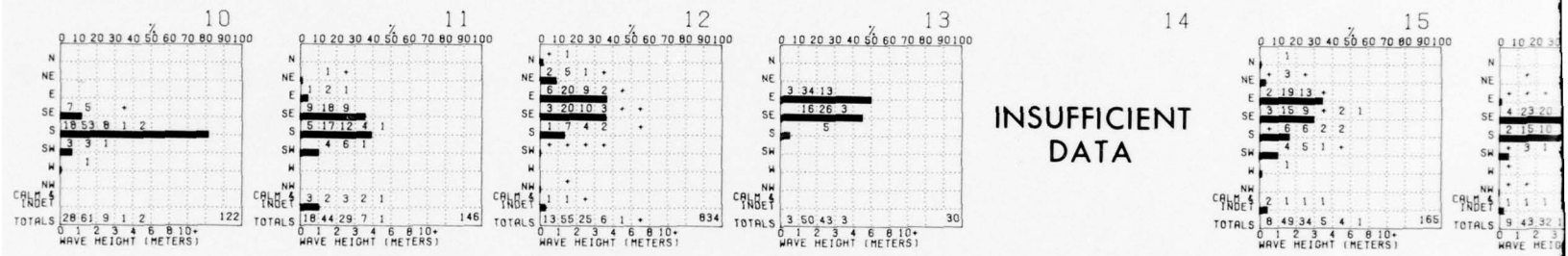

Wave direction and height.
Direction frequency (top scale). Bars represent percent frequency of waves from each direction.
Height frequency (bottom scale). Printed figures represent percent frequency of wave heights observed from each direction.
(5% of all waves were from the N.)
+ indicates < 5% but >0.
(1% of all waves were from the S with heights from 6-7.5 meters.)
Number of observations.
(2% of the waves from all directions had heights ≥10 meters.)
WAVE HEIGHT (METERS)
WAVE HEIGHT INTERVAL
Feet 0-2 3-6 7-9 10-12 13-19 20-25 26-32 ≥33
Meters 0-.5 1-1.5 2-2.5 3-3.5 4-5.5 6-7.5 8-9.5 ≥10
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

WAVES (<1.5 AND <2.5 METERS)

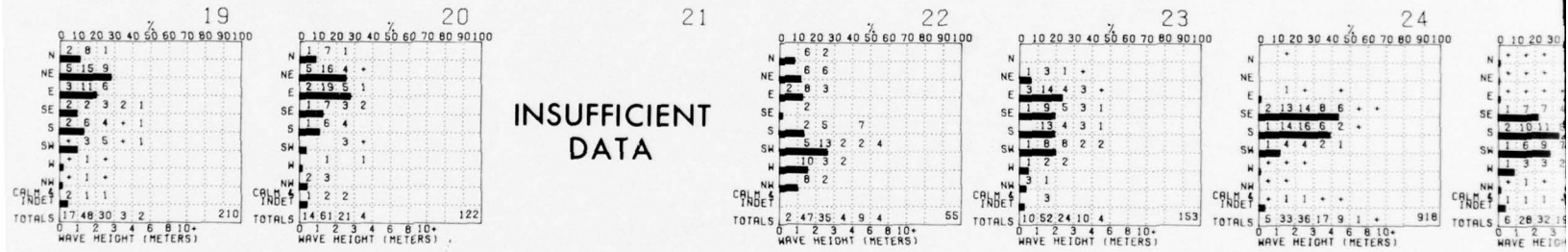


WAVE DIRECTION AND HEIGHT

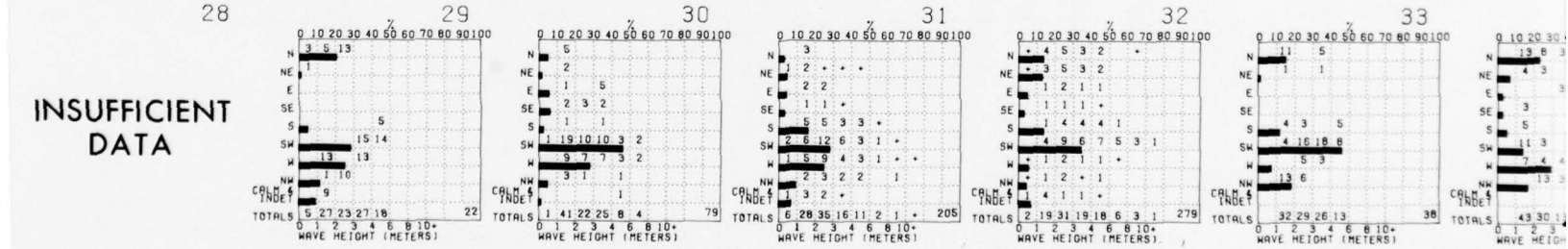




INSUFFICIENT DATA



INSUFFICIENT DATA



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37 INSUFFICIENT DATA

38 INSUFFICIENT DATA

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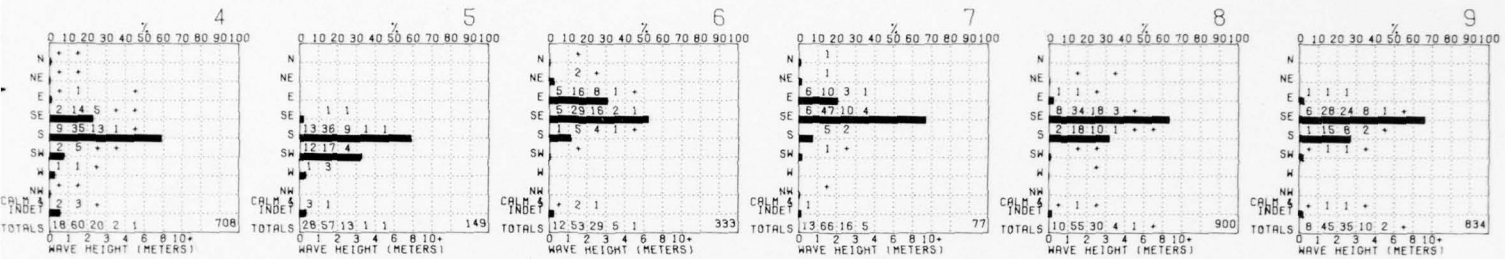
42 INSUFFICIENT DATA

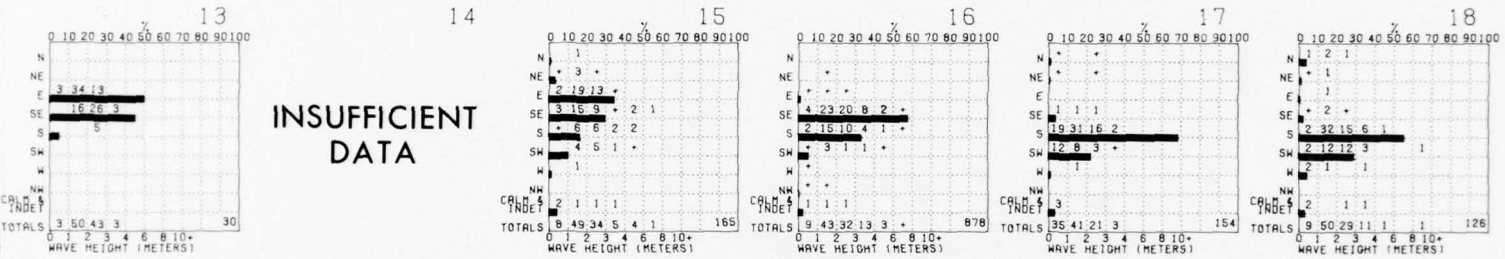
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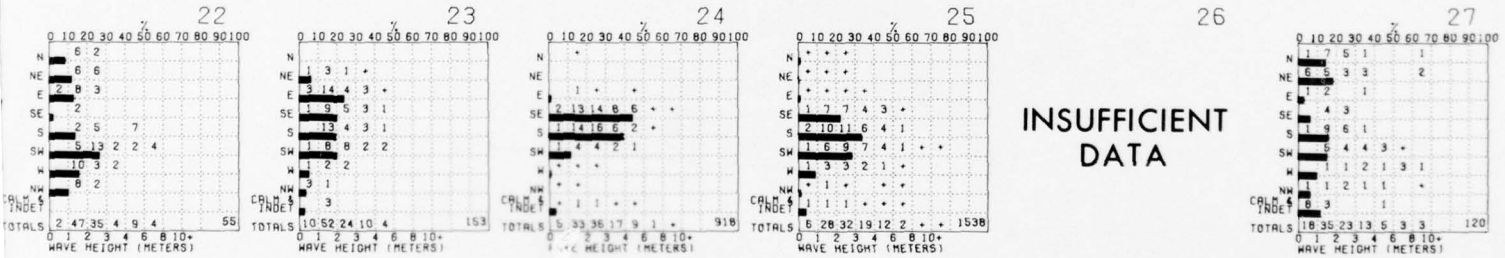
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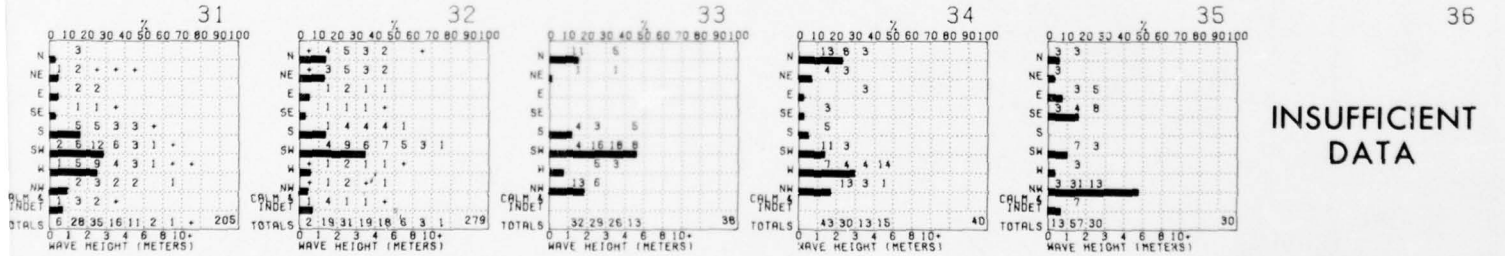
EIGHT

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40 INSUFFICIENT DATA

41 INSUFFICIENT DATA

42 INSUFFICIENT DATA

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44 INSUFFICIENT DATA

45 INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

JUNE

WAVES (≥

PERIOD (Seconds)

HEIGHT (METERS)	≤6	6–7	8–9	10–11	12–13	≥14	TOTAL
0–1.5	21	3	1	+	+	+	6
1–1.5	22	16	6	2	1	+	+
2–2.5	3	6	4	3	1	+	+
3–3.5	+	1	1	1	1	+	+
4–5.5	+	+	+	+	+	+	0
6–7.5	0	+	+	0	0	+	0
8–9.5	0	0	0	+	0	0	0
≥10	0	0	0	0	0	+	0

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Percent frequency of occurrence of wave period and height.

(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)

+ indicates <.5% but >0.

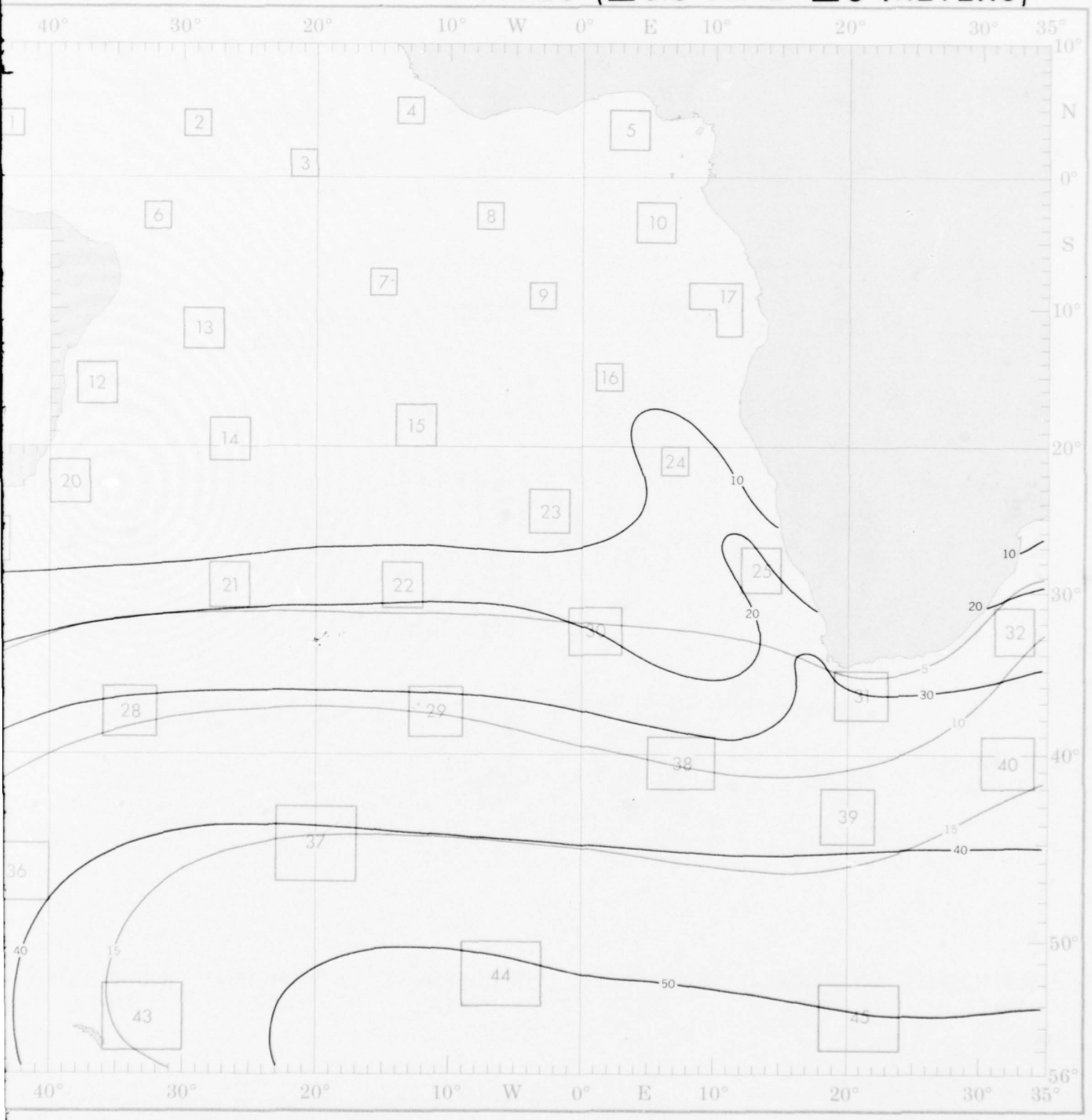
Number of observations.

Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.

BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)

RED LINE - Percent frequency of wave height ≥6 meters (20 feet)

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	3	1	0	0	0	3
1-1.5	33	24	6	2	1	0	3
2-2.5	3	4	5	1	0	+	+
3-3.5	1	+	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

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2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	1	0	0	0	9
1-1.5	20	22	3	1	1	+	14
2-2.5	2	4	1	2	0	0	1
3-3.5	0	+	1	0	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

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3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	1	0	0	0	0	0
1-1.5	30	25	9	0	0	0	0
2-2.5	3	3	7	0	0	0	0
3-3.5	0	0	0	1	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

67

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	1	+	0	0	5
1-1.5	23	17	7	2	2	1	8
2-2.5	3	5	5	2	1	2	1
3-3.5	+	+	1	+	+	0	0
4-5.5	0	+	+	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

716

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	1	0	0	0	0	12
1-1.5	23	12	7	1	1	0	13
2-2.5	3	5	2	0	0	0	3
3-3.5	0	1	0	0	0	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

152

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	3	0	0	0	0	4
1-1.5	18	18	4	1	+	0	12
2-2.5	3	10	9	1	1	0	4
3-3.5	+	4	1	0	0	0	0
4-5.5	0	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

335

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	21	3	0	5	0	0	4
1-1.5	22	14	3	6	4	1	7
2-2.5	0	0	3	0	1	0	5
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	2
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

131

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	0	0	0	0	9
1-1.5	16	14	6	3	2	0	2
2-2.5	2	8	7	3	3	3	3
3-3.5	0	1	1	1	0	1	2
4-5.5	0	0	0	1	0	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

148

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	+	1	0	0	4
1-1.5	23	18	4	1	1	+	5
2-2.5	3	10	6	2	+	+	2
3-3.5	1	2	1	1	+	+	+
4-5.5	0	+	+	0	0	0	+
6-7.5	0	+	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

861

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	3	0	0	0	0	0
1-1.5	23	10	16	0	0	0	0
2-2.5	10	16	10	0	0	0	6
3-3.5	0	3	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	3
1-1.5	22	13	5	2	4	0	2
2-2.5	3	10	11	2	4	2	1
3-3.5	0	1	0	1	1	0	2
4-5.5	0	0	2	2	0	0	0
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

168

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	0	0	0	4
1-1.5	15	20	7	+	+	0	4
2-2.5	3	7	11	3	2	1	3
3-3.5	0	0	2	0	+	0	1
4-5.5	0	1	+	0	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

213

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	2	0	0	0	0	2
1-1.5	19	18	9	2	1	0	9
2-2.5	2	9	3	2	2	0	2
3-3.5	2	0	1	1	0	1	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

127

INSUFFICIENT DATA

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	0
1-1.5	15	18	5	0	4	2	4
2-2.5	9	16	7	2	0	0	0
3-3.5	0	0	2	0	2	0	0
4-5.5	2	5	0	0	2	0	0
6-7.5	0	0	0	2	0	2	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

55

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	1
1-1.5	18	13	11	1	3	1	3
2-2.5	3	9	5	3	3	1	0
3-3.5	2	3	4	2	0	0	0
4-5.5	0	0	1	1	1	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

158

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	+	+	0	0	1
1-1.5	13	8	5	2	1	+	3
2-2.5	4	11	9	5	2	2	3
3-3.5	2	4	5	2	2	1	2
4-5.5	+	3	3	1	+	+	1
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

921

INSUFFICIENT DATA

28

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	5	0	0	0
1-1.5	18	0	0	0	0	0	9
2-2.5	9	9	5	0	0	0	0
3-3.5	0	14	5	5	5	0	0
4-5.5	0	0	0	14	0	5	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	0
1-1.5	13	14	8	5	1	0	0
2-2.5	0	4	14	4	0	0	0
3-3.5	1	5	3	9	3	3	3
4-5.5	0	0	4	0	0	3	1
6-7.5	0	1	3	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

80

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	2
1-1.5	11	9	1	2	0	0	5
2-2.5	5	13	9	5	1	0	2
3-3.5	0	4	7	1	+	1	1
4-5.5	2	2	1	2	2	1	0
6-7.5	0	+	+	+	1	0	0
8-9.5	0	0	0	1	0	0	0
≥10	0	0	0	0	0	+	0

207

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	0	0	0	0	0	1
1-1.5	6	4	4	1	+	0	4
2-2.5	10	10	5	3	1	0	2
3-3.5	3	6	5	2	1	0	3
4-5.5	1	2	5	5	3	2	1
6-7.5	0	+	0	3	1	1	+
8-9.5	0	0	+	+	2	0	+
≥10	0	0	0	0	1	0	0

279

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	18	0	0	0	0	8
2-2.5	3	5	5	5	0	8	3
3-3.5	0	3	11	13	0	0	0
4-5.5	0	8	3	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

38

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

4

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	11	1	1	+	0	0	5
1-1.5	23	17	7	2	2	1	8
2-2.5	3	5	5	2	1	2	1
3-3.5	+	+	1	+	+	0	0
4-5.5	0	+	+	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

716

5

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	17	1	0	0	0	0	12
1-1.5	23	12	7	1	1	0	13
2-2.5	3	5	2	0	0	0	3
3-3.5	0	1	0	0	0	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

152

6

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	6	3	0	0	0	0	4
1-1.5	18	18	4	1	+	0	12
2-2.5	3	10	9	1	1	0	4
3-3.5	+	4	1	0	0	0	0
4-5.5	0	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

335

7

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	10	0	0	0	0	0	3
1-1.5	32	22	8	1	0	1	1
2-2.5	5	8	1	0	0	0	1
3-3.5	0	1	1	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

77

8

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	7	1	1	+	0	0	2
1-1.5	22	15	7	2	1	+	8
2-2.5	4	10	8	3	2	1	1
3-3.5	+	2	1	1	+	+	+
4-5.5	+	+	+	+	0	0	0
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

905

9

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	6	1	+	0	0	0	2
1-1.5	17	11	7	2	2	+	6
2-2.5	6	13	7	4	1	1	3
3-3.5	1	4	3	1	+	+	+
4-5.5	+	+	+	+	+	0	0
6-7.5	0	+	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

837

13

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	3	3	0	0	0	0	0
1-1.5	23	10	16	0	0	0	0
2-2.5	10	16	10	0	0	0	6
3-3.5	0	3	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	7	0	0	0	0	0	3
1-1.5	22	13	5	2	4	0	2
2-2.5	3	10	11	2	4	2	1
3-3.5	0	1	0	1	1	0	2
4-5.5	0	0	2	2	0	0	0
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

168

16

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	5	1	+	+	0	0	3
1-1.5	14	14	7	2	1	1	5
2-2.5	5	9	8	4	1	1	3
3-3.5	1	4	3	2	1	1	1
4-5.5	+	1	1	+	+	+	0
6-7.5	0	+	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

887

17

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	23	5	3	0	0	0	6
1-1.5	16	10	7	1	1	1	3
2-2.5	4	5	8	1	1	1	1
3-3.5	0	0	3	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

160

18

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	8	2	0	0	0	0	3
1-1.5	16	19	8	2	0	0	3
2-2.5	2	5	7	8	4	1	1
3-3.5	0	4	4	2	1	0	1
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	1	0	0	0
≥10	0	0	0	0	0	0	0

131

22

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	2	0	0	0	0	0	0
1-1.5	15	18	5	0	4	2	4
2-2.5	9	16	7	2	0	0	0
3-3.5	0	0	2	0	2	0	0
4-5.5	2	5	0	0	2	0	0
6-7.5	0	0	0	2	0	2	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

55

23

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	12	0	0	0	0	0	1
1-1.5	18	13	11	1	3	1	3
2-2.5	3	9	5	3	3	1	0
3-3.5	2	3	4	2	0	0	0
4-5.5	0	0	1	1	1	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

158

24

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	3	1	+	+	0	0	1
1-1.5	13	8	5	2	1	+	3
2-2.5	4	11	9	5	2	2	3
3-3.5	2	4	5	2	2	1	2
4-5.5	+	3	3	1	+	+	1
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

921

25

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	5	+	1	+	0	0	1
1-1.5	9	7	5	2	2	1	4
2-2.5	4	8	8	5	2	1	3
3-3.5	1	4	5	4	2	1	1
4-5.5	1	2	4	2	2	1	+
6-7.5	0	+	1	+	+	+	+
8-9.5	0	0	+	0	+	0	0
≥10	0	0	0	0	0	+	0

1557

26

INSUFFICIENT DATA

27

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	11	1	0	0	0	0	8
1-1.5	15	10	2	2	0	0	5
2-2.5	0	12	5	2	0	0	4
3-3.5	2	5	4	1	0	0	1
4-5.5	1	0	2	1	0	0	1
6-7.5	0	0	0	0	3	0	0
8-9.5	0	0	2	0	1	0	0
≥10	0	0	0	0	0	0	0

123

31

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	5	0	0	0	0	0	2
1-1.5	11	9	1	2	0	0	5
2-2.5	5	13	9	5	1	0	2
3-3.5	0	4	7	1	+	1	1
4-5.5	2	2	1	2	2	1	0
6-7.5	0	+	+	+	1	0	0
8-9.5	0	0	0	1	0	0	0
≥10	0	0	0	0	0	+	0

207

32

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	1	0	0	0	0	0	1
1-1.5	6	4	4	1	+	0	4
2-2.5	10	10	5	3	1	0	2
3-3.5	3	6	5	2	1	0	3
4-5.5	1	2	5	5	3	2	1
6-7.5	0	+	0	3	1	1	+
8-9.5	0	0	+	+	2	0	+
≥10	0	0	0	0	1	0	0

279

33

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	18	0	0	0	0	8
2-2.5	3	5	5	5	0	8	3
3-3.5	0	3	11	13	0	0	0
4-5.5	0	8	3	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

38

34

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	5	0	0	0	0	0	0
1-1.5	17	14	5	0	0	0	5
2-2.5	7	12	7	2	0	0	0
3-3.5	0	5	2	2	2	0	0
4-5.5	0	0	7	7	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

42

35

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6- 7	8- 9	10- 11	12- 13	>13	IND
0-.5	16	0	0	0	0	0	0
1-1.5	29	13	0	0	6	0	6
2-2.5	3	23	3	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

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INSUFFICIENT DATA

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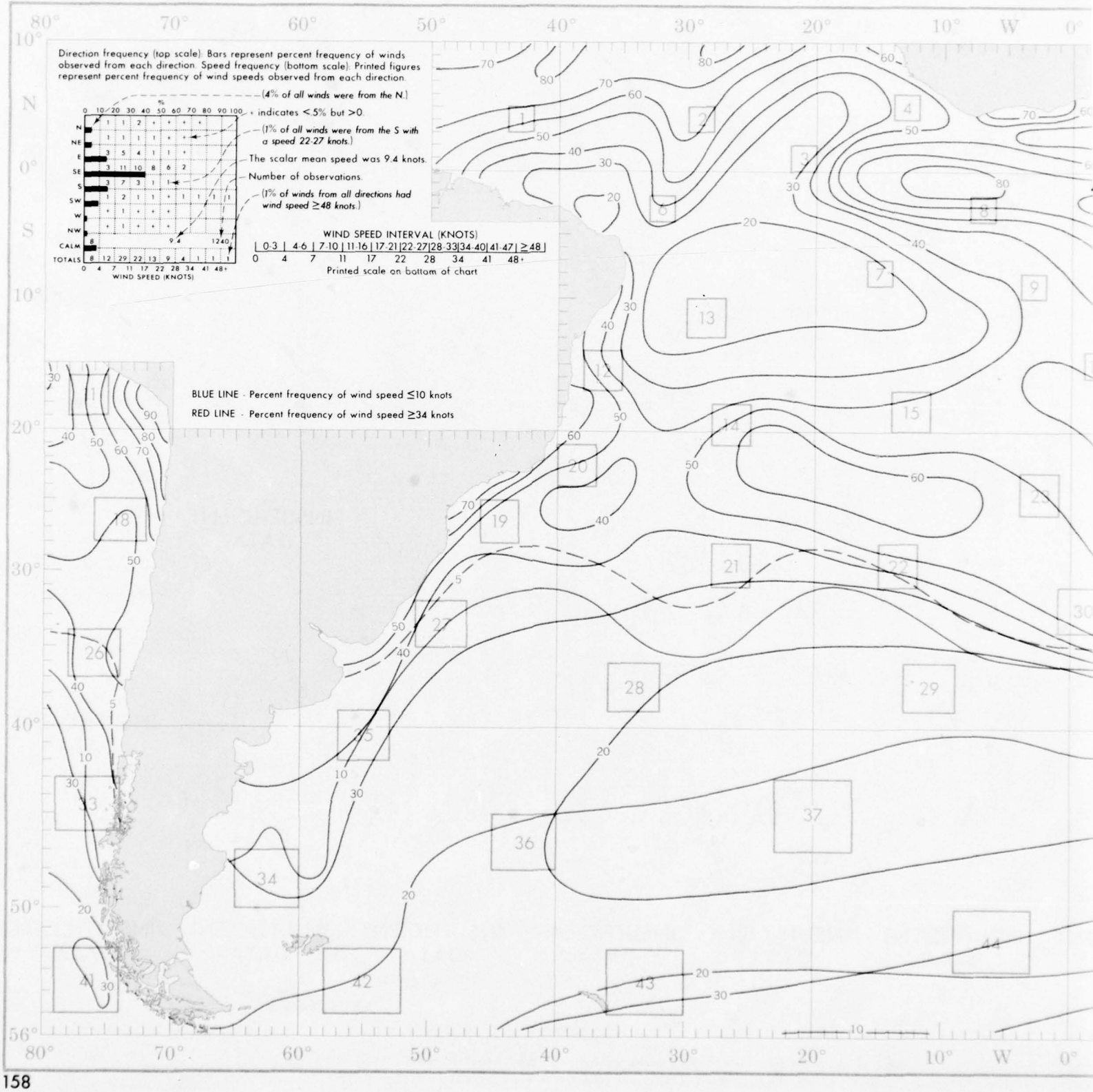
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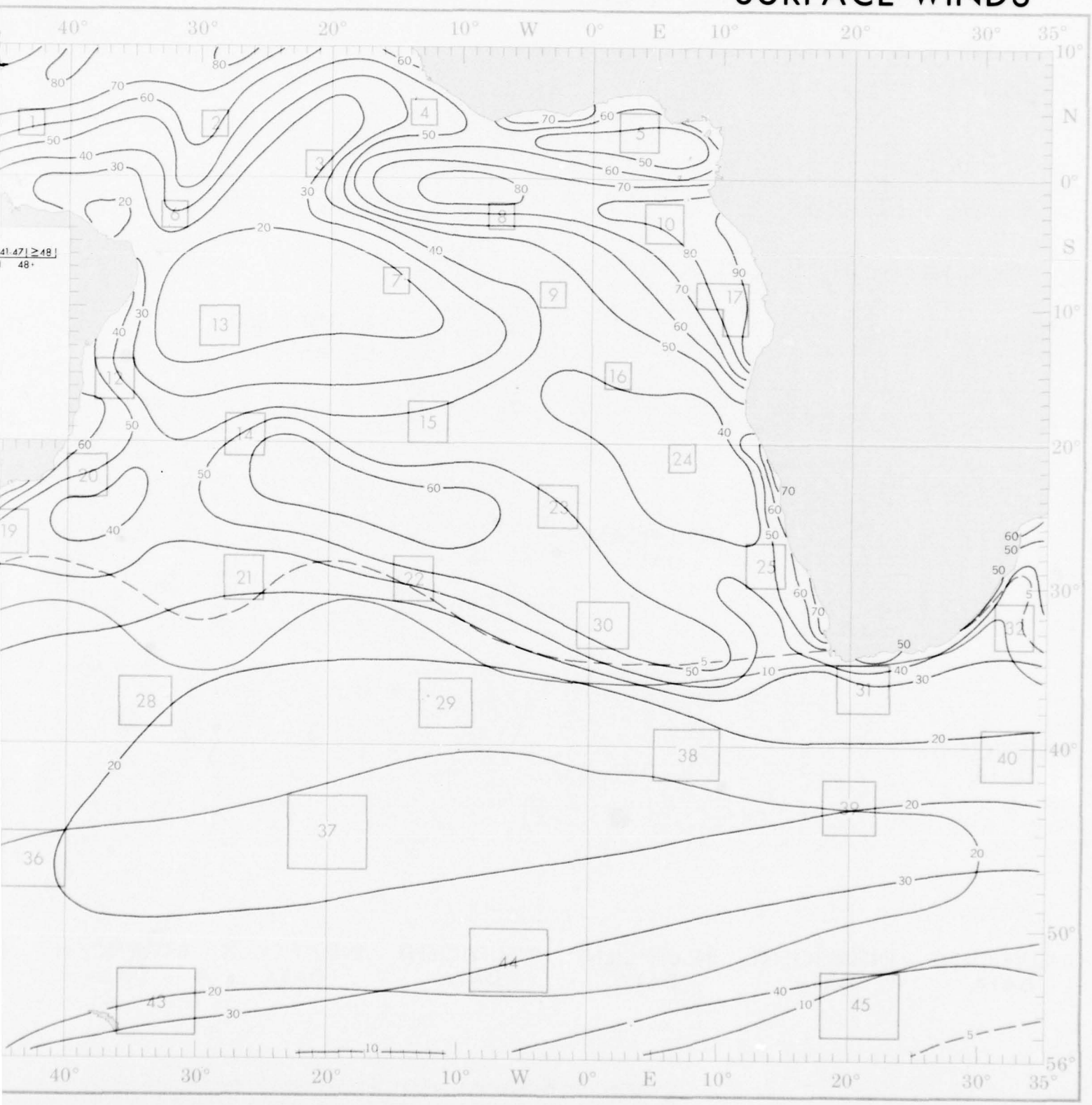
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lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

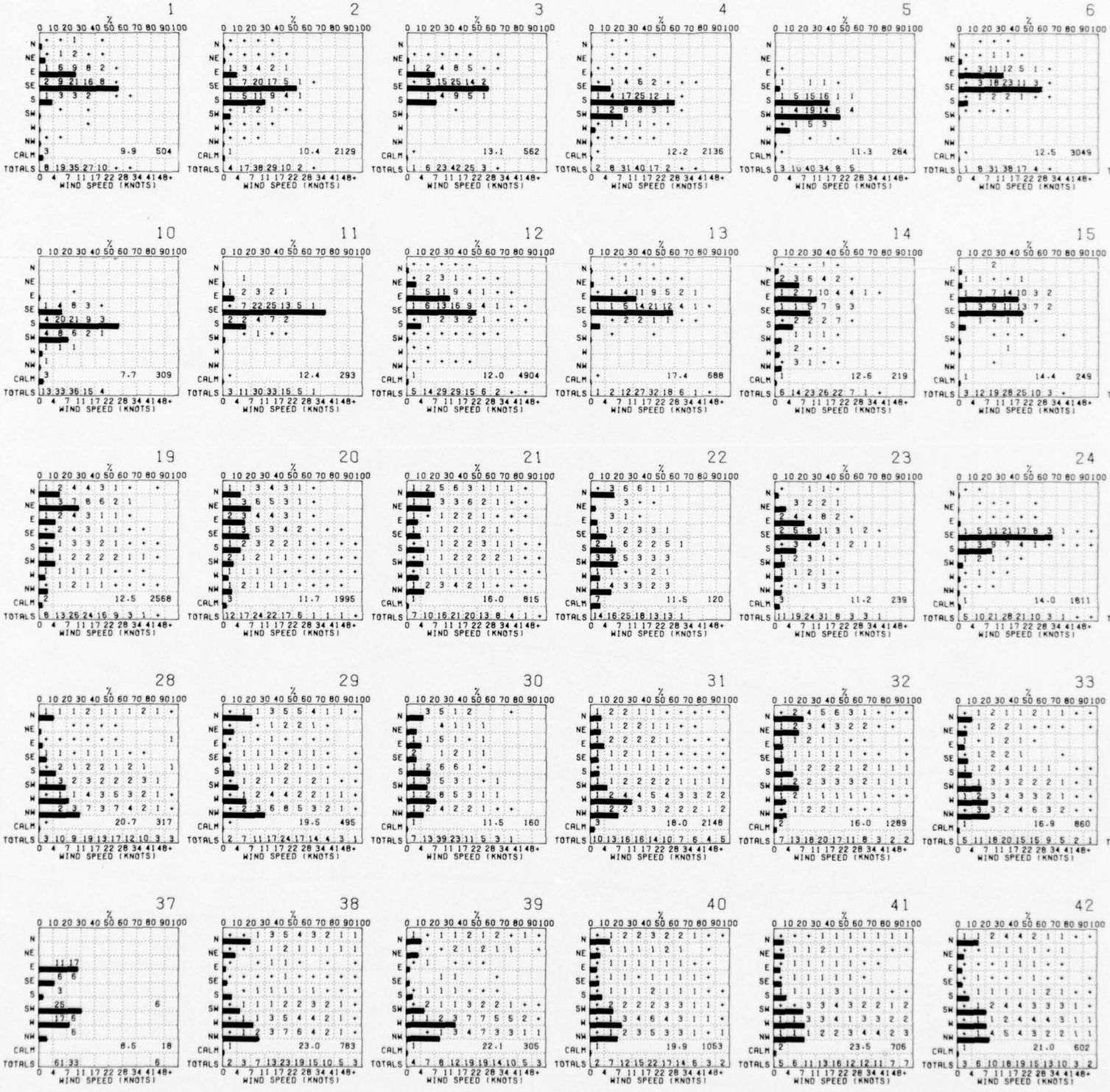
JULY


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

SURFACE WINDS

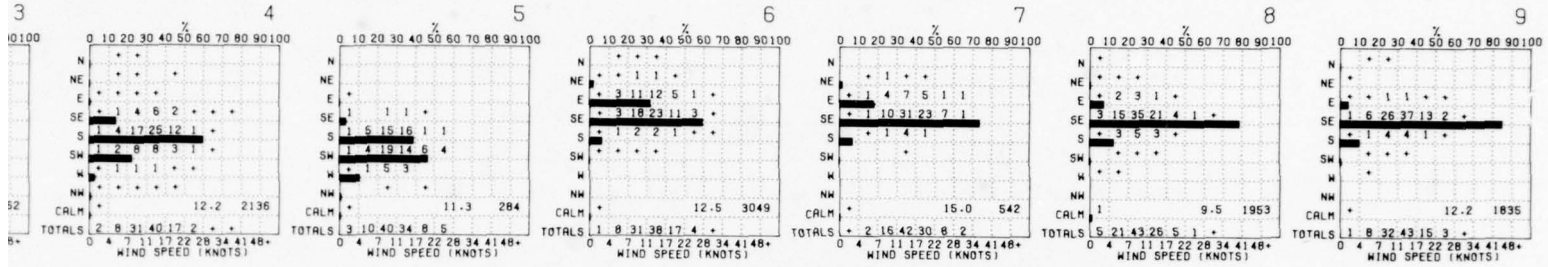


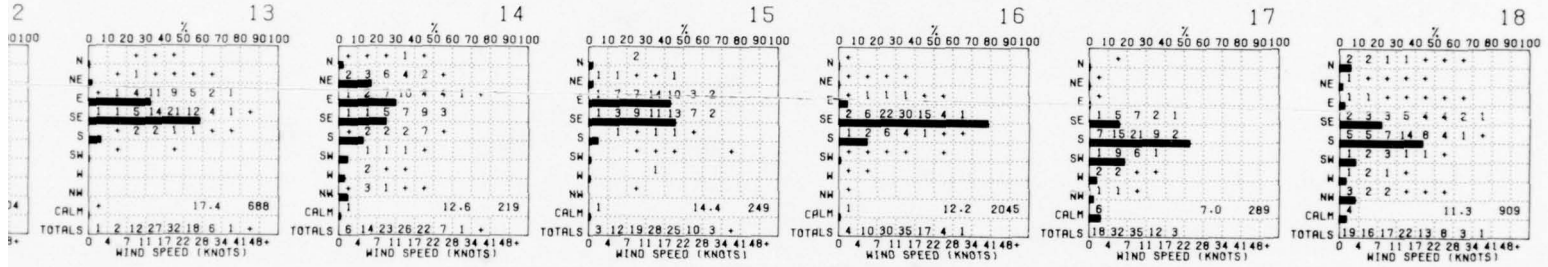
WIND DIRECTION AND SPEED

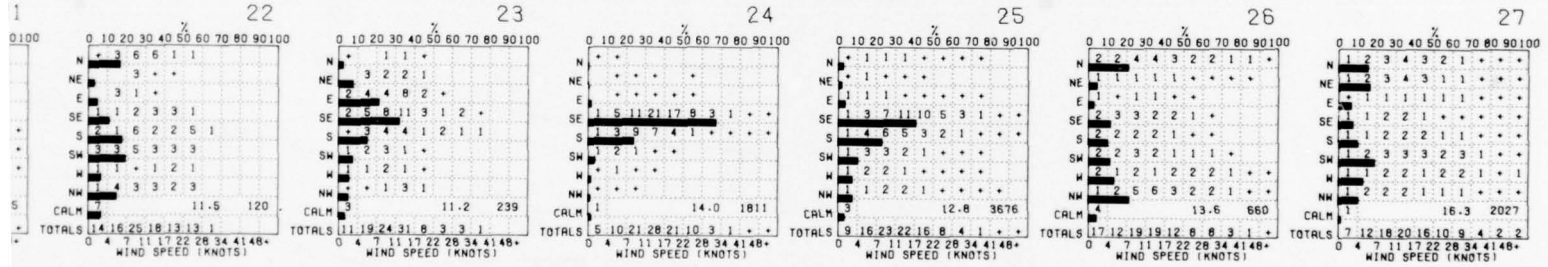


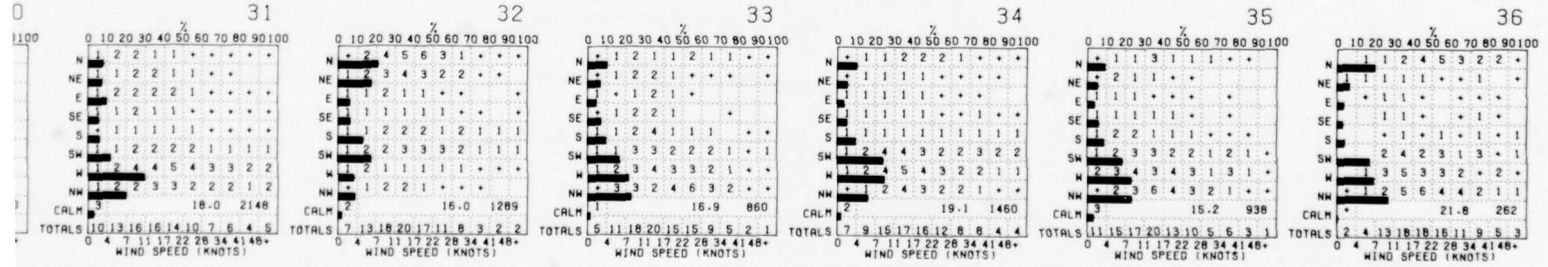
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

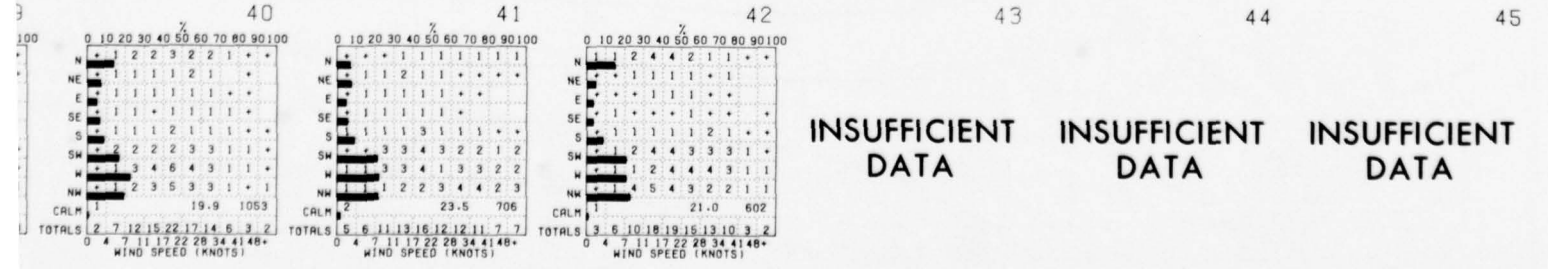
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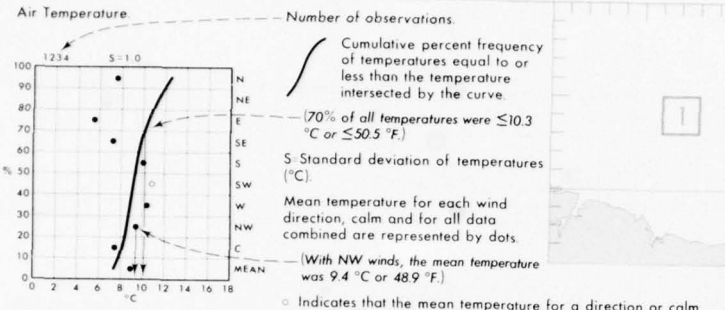
43 44 45

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t the objective compilation of available data for specified areas without regard to suspected biases.
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JULY

SURFA



The mean temperature is omitted when less than 10 observations for a direction or calm were available.

BLACK LINE - *Mean air temperature* (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

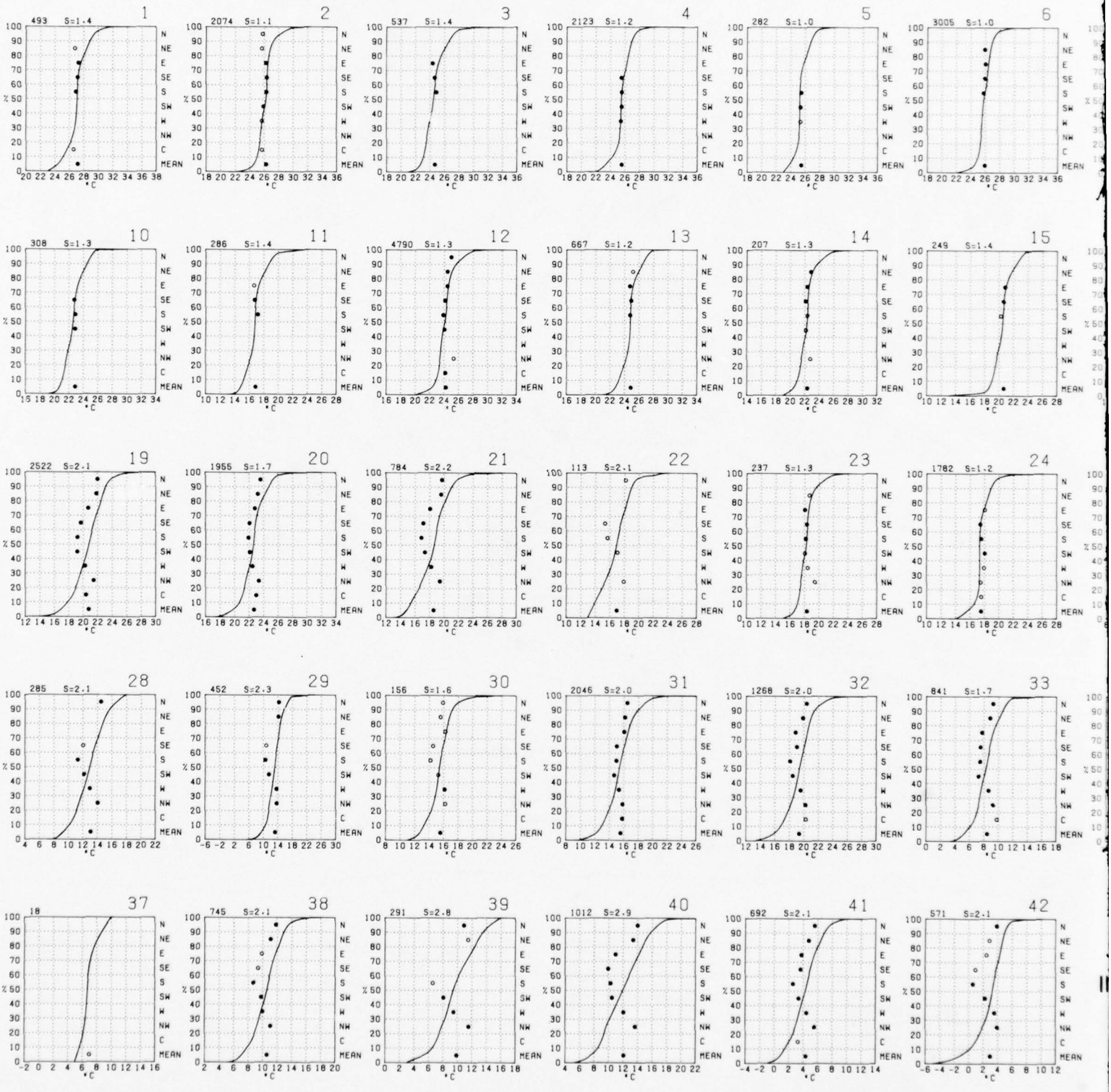
SURFACE AIR TEMPERATURE



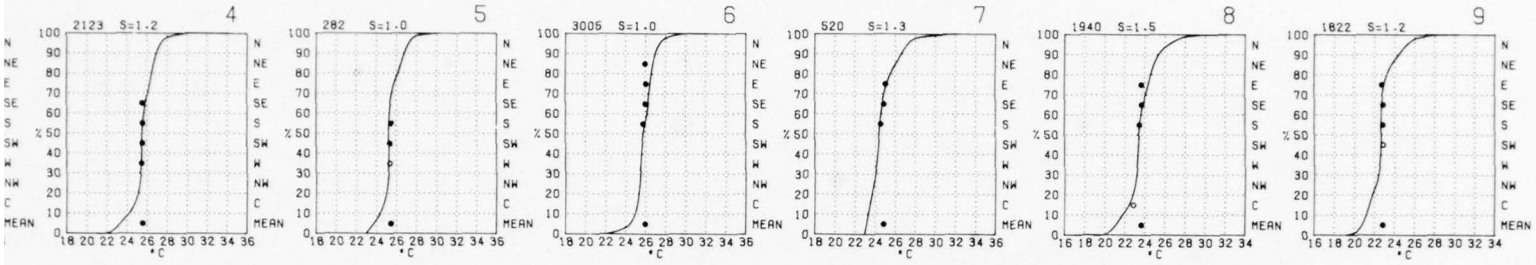
or calm

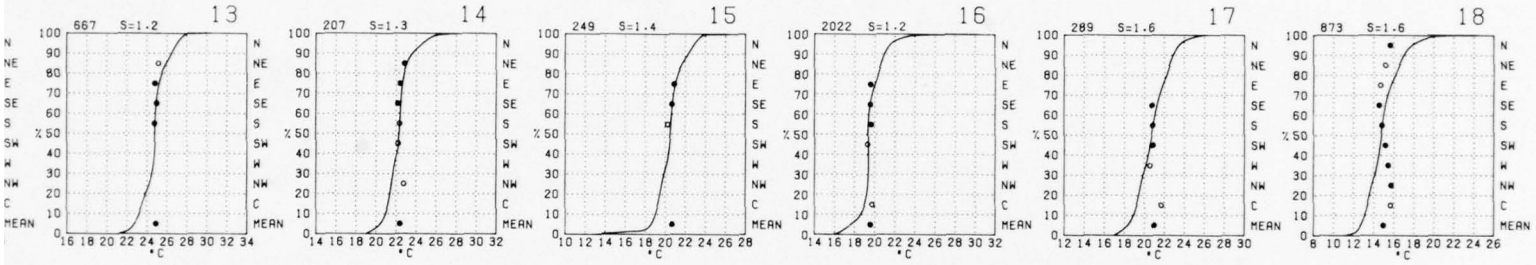
available.

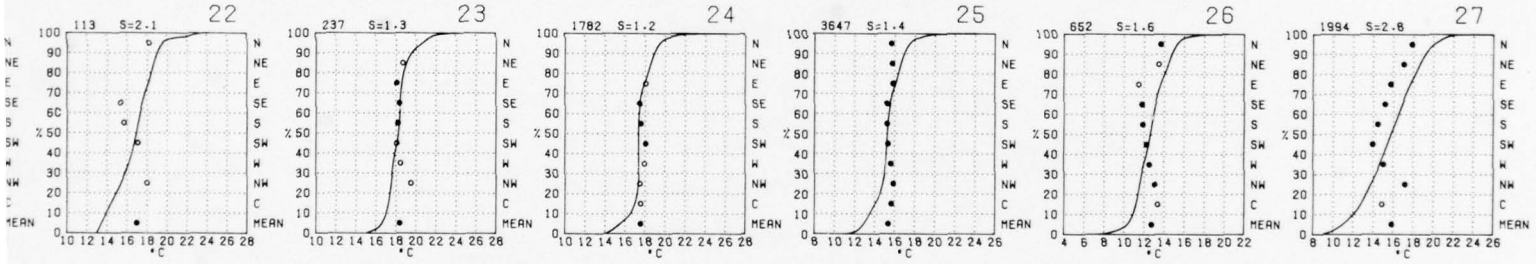
SURFACE AIR TEMPERATURE

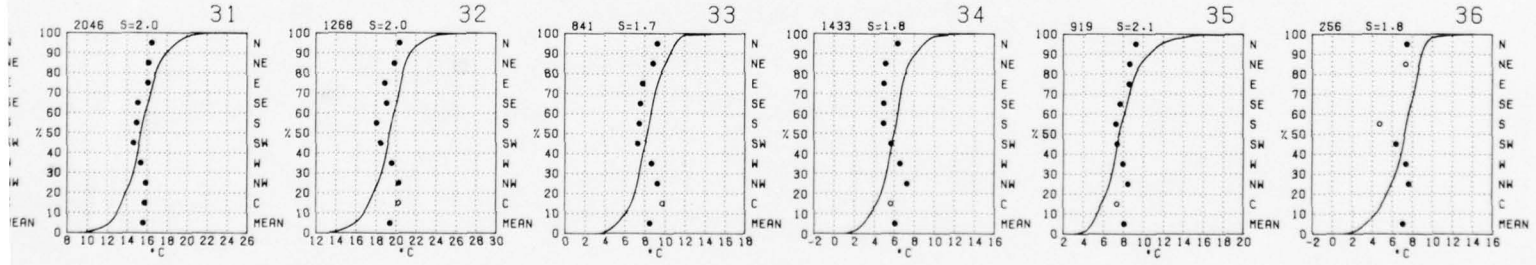


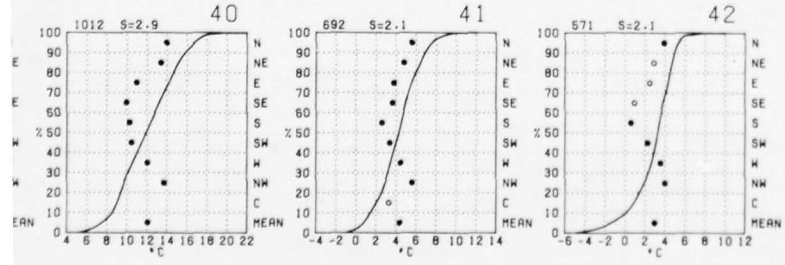
Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b











43

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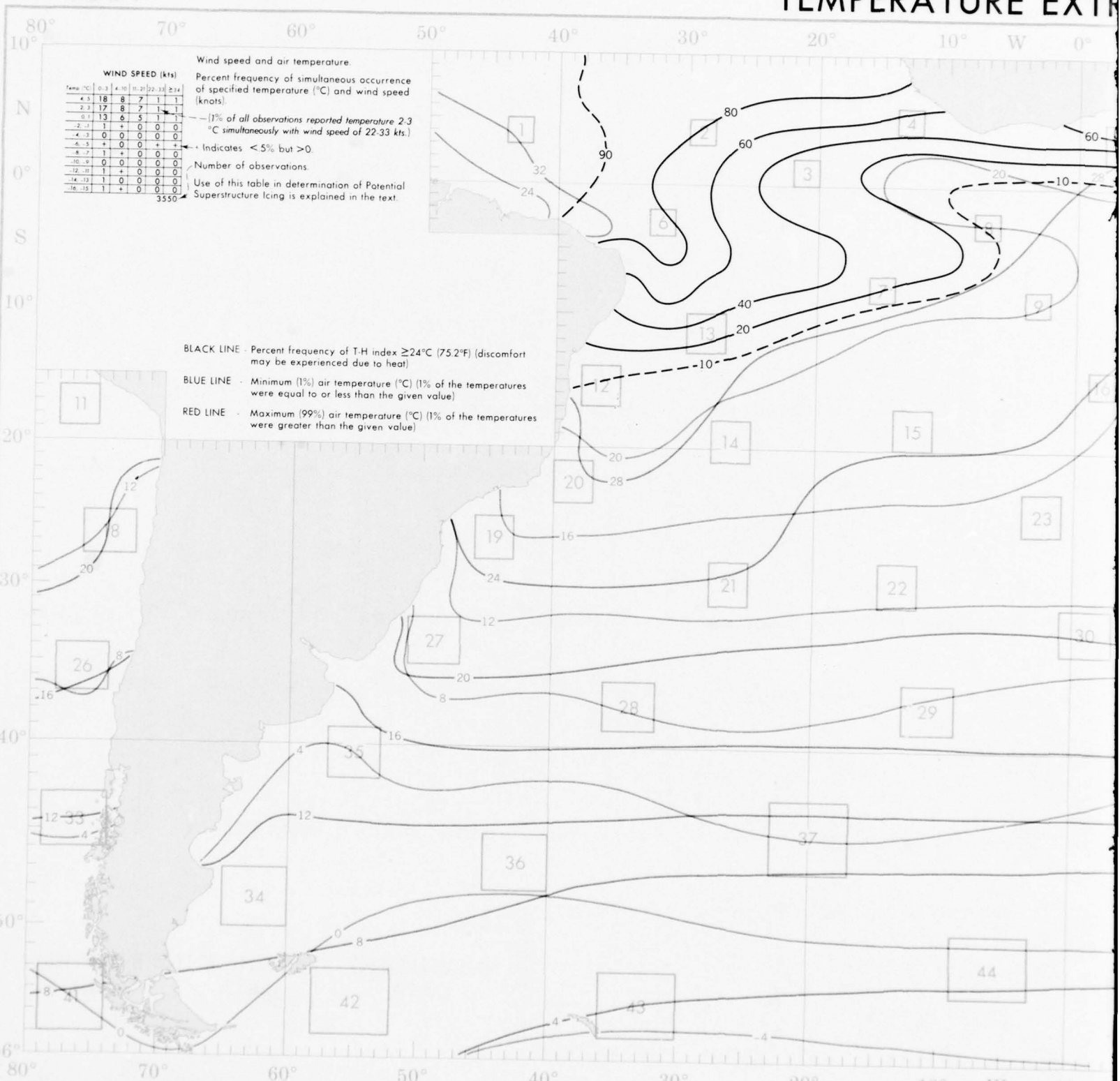
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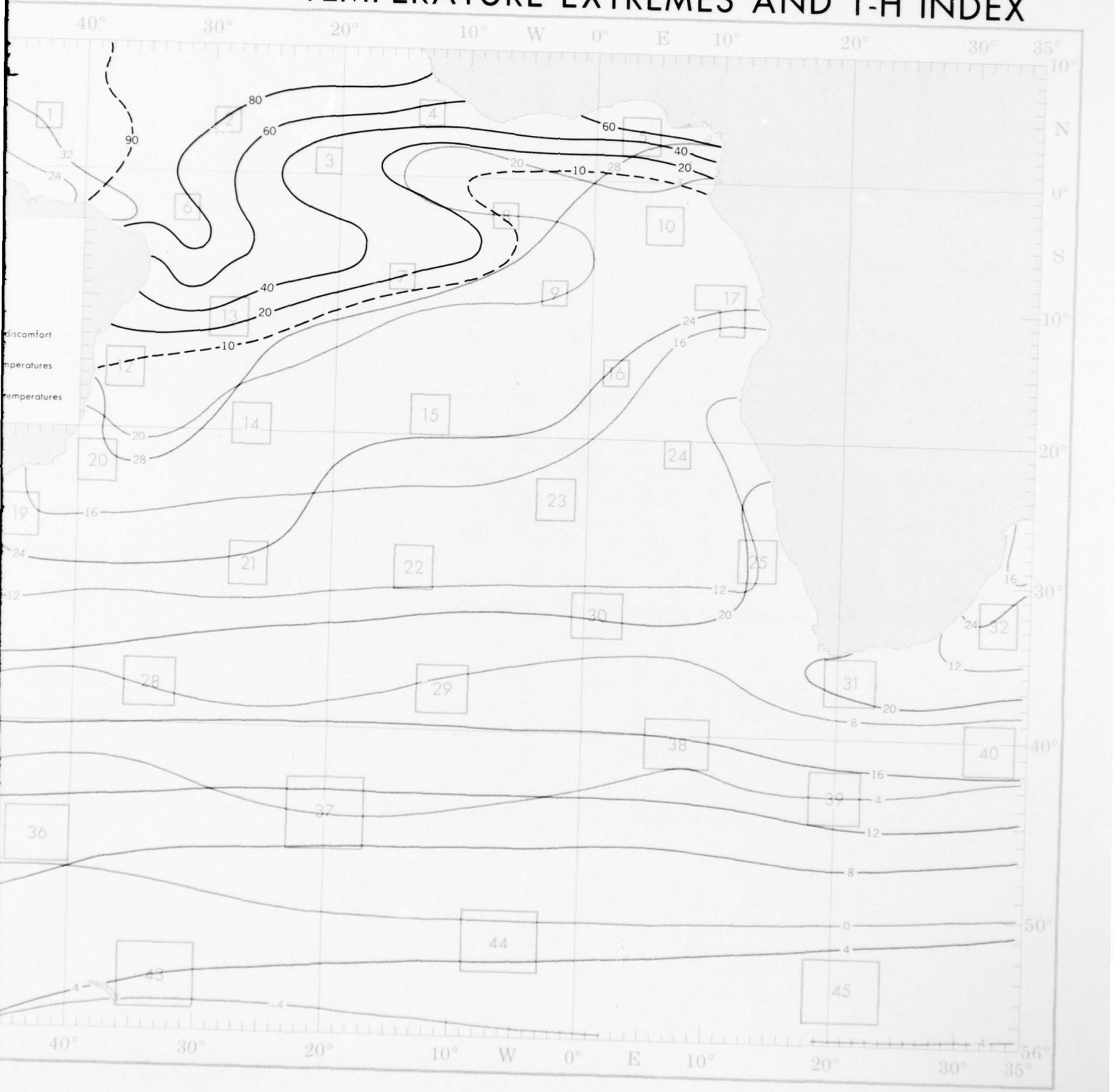
t the objective compilation of available data for specified areas without regard to suspected biases.
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JULY

TEMPERATURE EXTR



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	+	0	0
30.31	1	1	2	0	0
28.29	2	15	15	0	0
26.27	4	33	19	+	0
24.25	1	4	1	+	0
22.23	0	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

495

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	+	0
28.29	1	6	6	+	0
26.27	3	36	27	2	0
24.25	1	11	6	+	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2080

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	0	0	0	0
28.29	+	1	3	0	0
26.27	+	8	15	1	0
24.25	+	16	37	2	0
22.23	+	4	12	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

537

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	+	2	3	+	+
26.27	1	19	29	1	0
24.25	1	16	24	1	0
22.23	+	1	2	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2131

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	1	1	3	0	0
26.27	2	24	16	2	0
24.25	+	24	22	3	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

282

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	3	3	+	0
26.27	1	25	39	3	0
24.25	+	10	13	1	0
22.23	0	1	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

3006

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	0	+	0	0	0
26.27	+	2	+	0	0
24.25	3	15	5	0	0
22.23	8	46	12	0	0
20.21	2	5	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

310

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	0	1	0	0
20.21	1	1	1	0	0
18.19	1	9	9	2	0
16.17	1	27	32	4	0
14.15	+	4	5	1	0
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

286

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	+	1	1	+	0
26.27	1	7	6	1	0
24.25	3	26	27	4	+
22.23	1	9	10	3	+
20.21	+	+	1	+	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

4797

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	1	1	+	+
26.27	+	4	15	6	+
24.25	+	7	37	15	1
22.23	+	3	5	2	+
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

667

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	+	0	0
24.25	2	7	8	0	0
22.23	2	22	33	4	0
20.21	2	5	9	3	+
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

207

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	2	2	0	0
22.23	+	6	13	5	0
20.21	2	19	31	7	0
18.19	1	4	6	1	0
16.17	0	0	+	0	+
14.15	0	+	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

249

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	0	+	0
26.27	+	1	+	+	0
24.25	+	3	3	1	0
22.23	2	13	15	3	0
20.21	4	14	12	3	+
18.19	2	7	7	2	+
16.17	+	2	2	2	+
14.15	0	+	+	+	0
12.13	0	0	0	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2522

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	+	+	+	0	0
26.27	+	2	2	0	+
24.25	3	11	10	2	+
22.23	6	20	19	3	+
20.21	2	6	7	2	1
18.19	+	1	1	+	+
16.17	0	+	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1958

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	0	0	0
24.25	0	+	+	+	+
22.23	+	1	3	1	1
20.21	1	7	14	4	1
18.19	4	9	14	8	1
16.17	1	6	8	4	2
14.15	+	2	3	4	1
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

784

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	1	0	0
22.23	0	0	0	0	0
20.21	0	3	2	1	0
18.19	4	19	7	4	0
16.17	6	13	13	4	0
14.15	2	3	9	6	0
12.13	0	2	1	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

113

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	+	1	0	0
20.21	2	6	7	0	0
18.19	10	28	21	4	+
16.17	+	8	9	1	1
14.15	0	0	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

241

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	+	+	+	+	0
20.21	+	2	2	1	0
18.19	3	14	20	4	+
16.17	3	14	26	7	1
14.15	+	1	1	+	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1807

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	+	1	2	6	3
14.15	2	4	9	8	4
12.13	1	11	13	9	5
10.11	0	4	6	4	2
8.9	0	0	1	2	2
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

285

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	+	+	0	0
20.21	0	0	+	0	0
18.19	0	+	1	1	0
16.17	0	1	6	3	1
14.15	+	5	13	13	3
12.13	1	4	15	10	2
10.11	1	4	5	3	1
8.9	+	2	+	1	+
6.7	0	1	0	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

452

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	0	0	0
20.21	0	1	0	0	0
18.19	1	3	4	2	0
16.17	3	21	12	4	1
14.15	4	23	13	2	0
12.13	0	2	5	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

156

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	+	+	+	0
20.21	1	1	1	+	+
18.19	2	4	4	2	1
16.17	3	10	10	6	5
14.15	4	10	11	6	5
12.13	1	2	3	2	2
10.11	+	+	+	+	+
8.9	+	+	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

2059

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	0	+	0
24.25	+	1	+	+	0
22.23	1	3	4	2	+
20.21	3	12	18	6	2
18.19	2	10	11	6	2
16.17	1	3	4	3	2
14.15	+	1	1	+	+
12.13	0	+	0	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1279

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	+	0	0
12.13	+	+	1	+	+
10.11	1	5	7	10	3
8.9	2	14	16	9	2
6.7	1	8	10	4	1
4.5	+	1	1	1	+
2.3	0	+	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

841

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	33	0	0	6
6.7	0	56	0	0	0
4.5	0	6	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

18

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	1	+	1
14.15	+	1	2	2	1
12.13	1	2	9	10	4
10.11	+	4	12	12	7
8.9	1	2	9	7	4
6.7	+	+	3	2	1
4.5	+	0	0	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

745

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	1
14.15	0	0	2	4	3
12.13	0	2	3	7	3
10.11	+	2	8	11	3
8.9	1	4	11	8	5
6.7	2	5	4	2	+
4.5	0	1	2	+	0
2.3	0	+	+	1	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

291

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	+	+
18.19	0	+	1	1	1
16.17	+	2	5	3	1
14.15	+	3	9	7	1
12.13	1	5	9	6	1
10.11	1	6	8	7	2
8.9	+	3	4	6	3
6.7	0	1	1	2	1
4.5	+	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0

1012

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	+	+	+
8.9	+	1	2	2	2
6.7	+	2	5	7	9
4.5	2	8	12	8	9
2.3	2	5	8	4	3
0.1	1	1	2	2	1
-2.-1	0	+	+	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

692

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	+	+	2	2	1
4.5	1	6	19	11	5
2.3	1	6	11	9	6
0.1	+	3	4	3	3
-2.-1	+	1	1	1	+
-4.-3	1	+	1	1	0
-6.-5	0	0	+	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

571

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

INS

MPERATURE

JULY

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	+	2	3	+	+
26.27	1	19	29	1	0
24.25	1	16	24	1	0
22.23	+	1	2	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2131

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	1	1	3	0	0
26.27	2	24	16	2	0
24.25	+	24	22	3	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

282

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	3	3	+	0
26.27	1	25	39	3	0
24.25	+	10	13	1	0
22.23	0	1	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

3006

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	+	0	0
28.29	0	+	3	0	0
26.27	0	4	18	1	0
24.25	+	13	44	7	0
22.23	0	1	6	1	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

520

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	1	1	+	0
26.27	+	5	4	+	0
24.25	1	21	15	+	0
22.23	3	35	11	0	0
20.21	+	2	1	+	0
18.19	+	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1956

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	+	+	0	0
26.27	+	2	2	+	0
24.25	+	8	13	1	0
22.23	1	28	38	2	0
20.21	+	2	4	+	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1826

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	1	1	+	+
26.27	+	4	15	6	+
24.25	+	7	37	15	1
22.23	+	3	5	2	+
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

657

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	+	0	0
24.25	2	7	8	0	0
22.23	2	22	33	4	0
20.21	2	5	9	3	+
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

207

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	2	2	0	0
22.23	+	6	13	5	0
20.21	2	19	31	7	0
18.19	1	4	6	1	0
16.17	0	0	+	0	+
14.15	0	+	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

249

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	0	+	0	0
26.27	0	0	+	0	0
24.25	+	+	+	0	0
22.23	+	2	3	+	0
20.21	1	18	22	2	0
18.19	1	18	25	3	0
16.17	+	+	1	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

2029

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	0	0	0
24.25	3	4	1	0	0
22.23	4	19	6	0	0
20.21	7	34	5	0	0
18.19	4	10	3	0	0
16.17	+	+	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

291

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	0	0	+	0
20.21	+	1	+	0	0
18.19	1	3	1	+	0
16.17	5	10	11	2	+
14.15	8	17	20	6	1
12.13	2	5	4	3	+
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

873

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	1	0	0
22.23	0	0	0	0	0
20.21	0	3	2	1	0
18.19	4	19	7	4	0
16.17	6	13	13	4	0
14.15	2	3	9	6	0
12.13	0	2	1	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

113

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	+	1	0	0
20.21	2	6	7	0	0
18.19	10	28	21	4	+
16.17	+	8	9	1	1
14.15	0	0	+	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

241

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	+	+	+	+	0
20.21	+	2	2	1	0
18.19	3	14	20	4	+
16.17	3	14	26	7	1
14.15	+	1	1	+	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1807

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	+	+	0	0
20.21	+	+	+	+	+
18.19	1	3	2	+	0
16.17	5	17	16	4	+
14.15	3	17	17	7	1
12.13	+	1	2	2	+
10.11	0	+	+	+	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

3691

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	0	0	0
16.17	1	1	1	1	+
14.15	5	8	10	5	2
12.13	6	17	14	7	2
10.11	3	5	6	4	1
8.9	1	0	+	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

652

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	+	0	0
22.23	+	+	1	+	0
20.21	1	2	4	2	1
18.19	1	5	9	4	1
16.17	2	10	10	4	2
14.15	2	7	8	4	2
12.13	1	3	4	4	1
10.11	1	1	1	1	1
8.9	+	+	+	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1995

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	+	+	+	0
20.21	1	1	1	+	+
18.19	2	4	4	2	1
16.17	3	10	10	6	5
14.15	4	10	11	6	5
12.13	1	2	3	2	2
10.11	+	+	+	+	+
8.9	+	+	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

2059

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	0	+	0
24.25	+	1	+	+	0
22.23	1	3	4	2	+
20.21	3	12	18	6	2
18.19	2	10	11	6	2
16.17	1	3	4	3	2
14.15	+	1	1	+	+
12.13	0	+	0	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1279

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	+	+	0	0
12.13	+	+	1	+	+
10.11	1	5	7	10	3
8.9	2	14	16	9	2
6.7	1	8	10	4	1
4.5	+	1	1	1	+
2.3	0	+	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

841

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	+	+
10.11	+	+	1	1	+
8.9	1	4	8	5	1
6.7	3	12	15	8	5
4.5	2	6	7	5	7
2.3	+	2	2	1	2
0.1	+	+	+	0	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

1433

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	+	0	+
16.17	0	0	+	+	0
14.15	+	+	1	1	+
12.13	+	1	2	1	1
10.11	1	5	6	1	1
8.9	3	12	13	6	3
6.7	6	11	10	5	3
4.5	1	2	1	1	+
2.3	0	0	+	+	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

920

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	0	0	0
10.11	0	1	+	2	+
8.9	0	8	19	13	7
6.7	1	6	11	9	6
4.5	+	1	6	3	2
2.3	0	+	+	1	2
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

256

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	+	+
18.19	0	+	1	1	1
16.17	+	2	5	3	1
14.15	+	3	9	7	1
12.13	1	5	9	6	1
10.11	1	6	8	7	2
8.9	+	3	4	6	3
6.7	0	1	1	2	1
4.5	+	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0

1012

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	+	+	+
8.9	+	1	2	2	2
6.7	+	2	5	7	9
4.5	2	8	12	8	9
2.3	2	5	8	4	3
0.1	1	1	2	2	1
-2.-1	0	+	+	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

692

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	+	+	2	2	1
4.5	1	6	19	11	5
2.3	1	6	11	9	6
0.1	+	3	4	3	3
-2.-1	+	1	1	1	+
-4.-3	1	+	1	1	0
-6.-5	0	0	+	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

571

43

INSUFFICIENT DATA

44

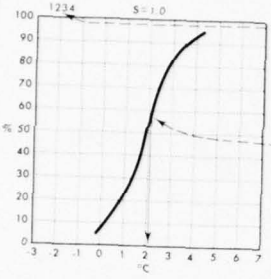
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

S- Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

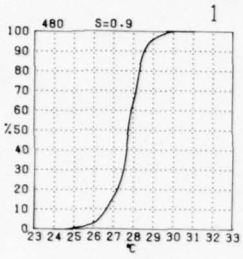
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

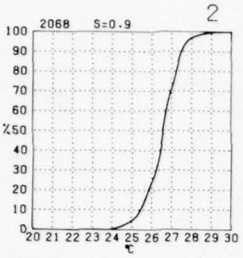
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

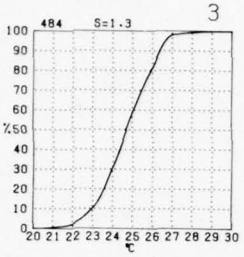
SEA SURFACE TEMPERATURE

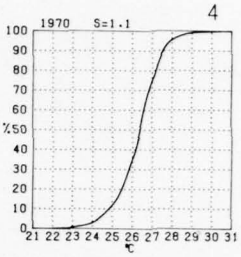


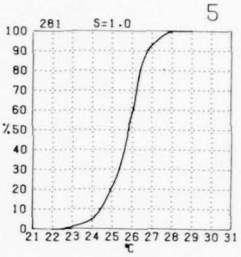
SEA SURFACE TEMPERATURE

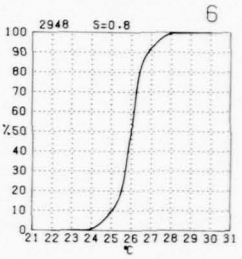


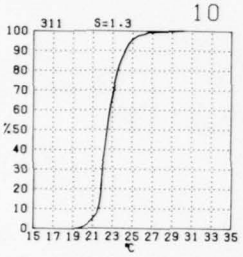


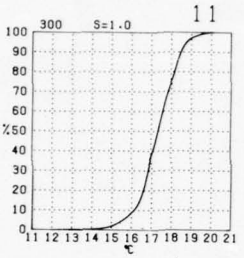


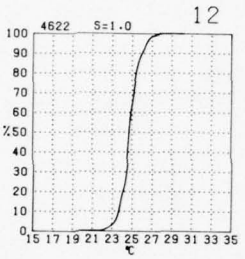


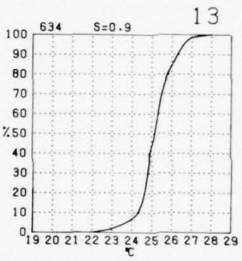


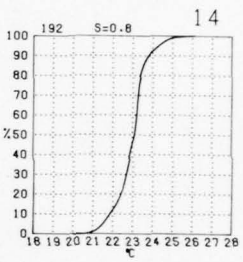


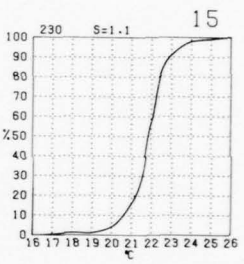


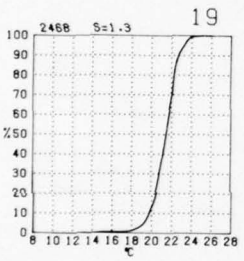


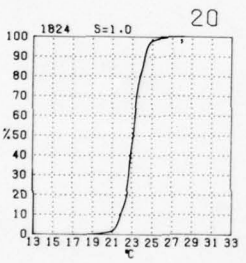


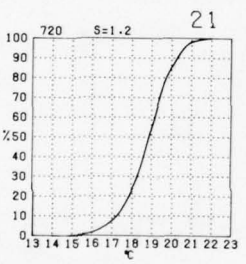


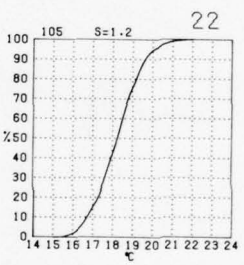


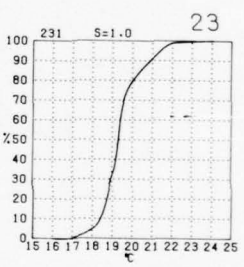


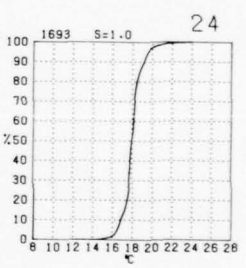


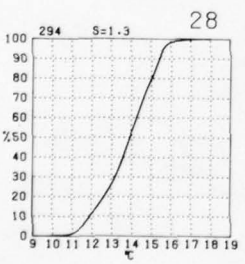


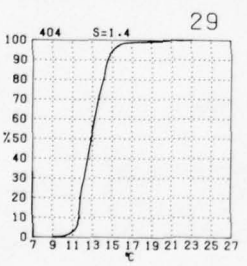


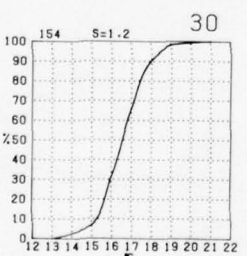


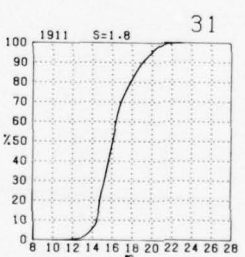


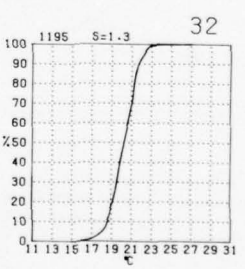


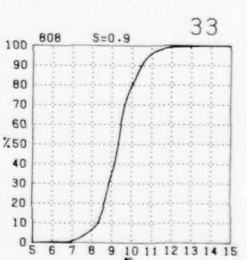






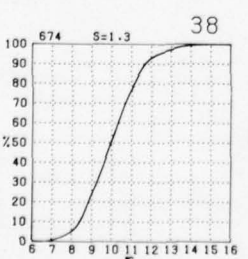


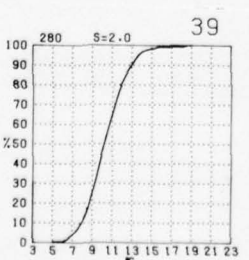


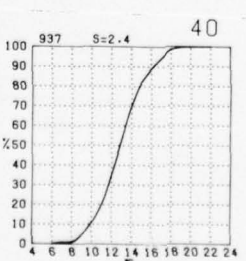


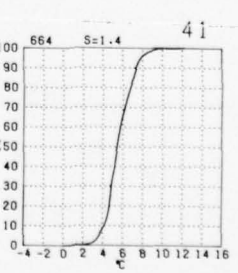
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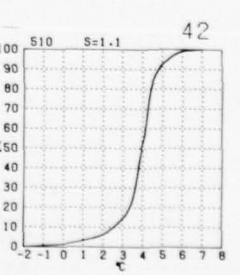
INSUFFICIENT DATA





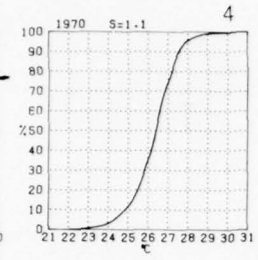


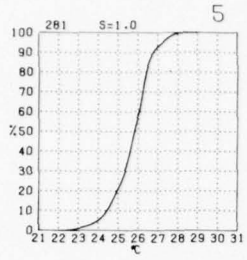


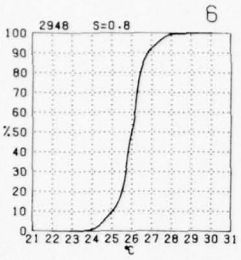


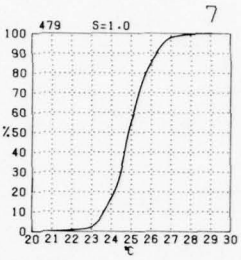
Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

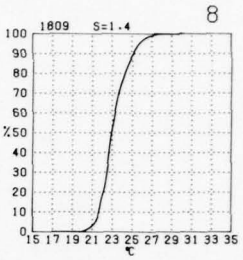
JULY

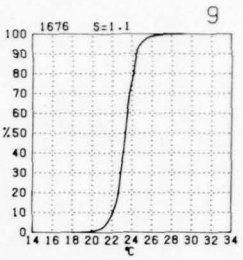


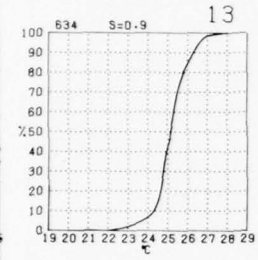


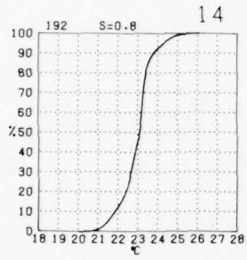


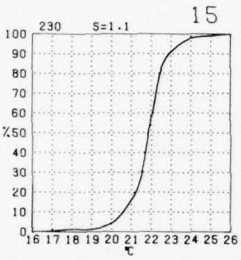


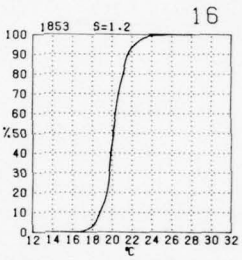


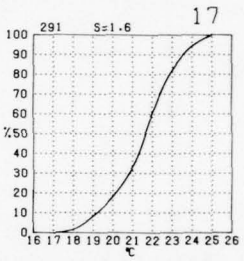


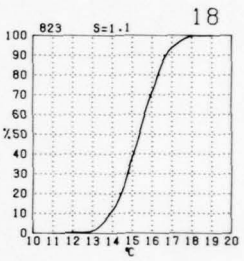


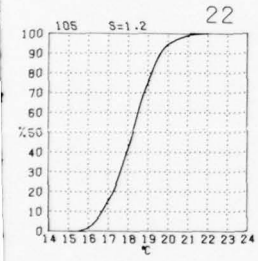


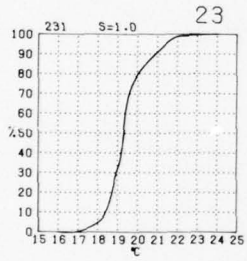


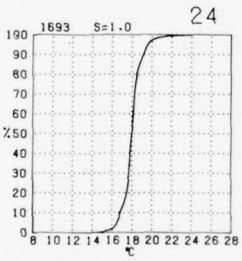


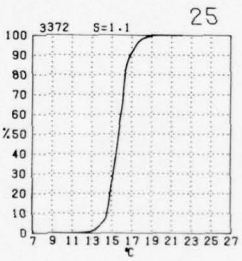


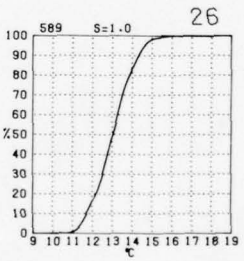


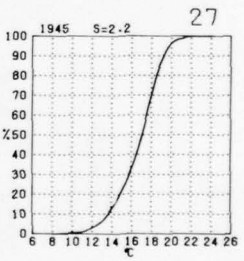


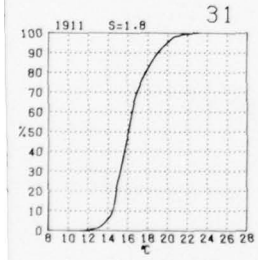


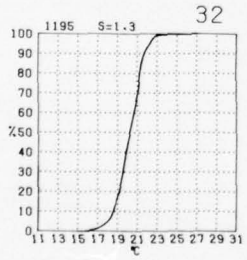


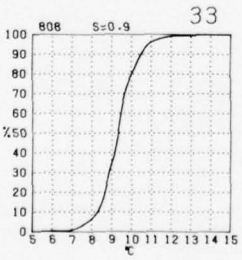


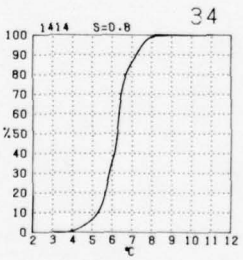


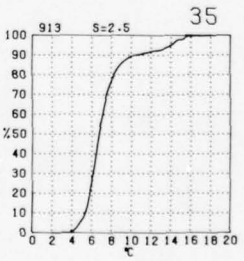


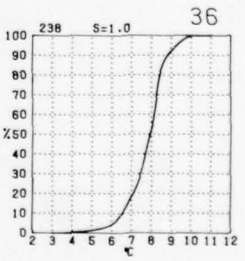


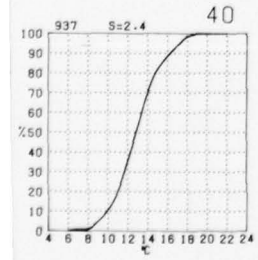


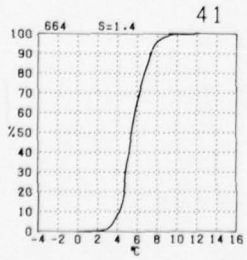


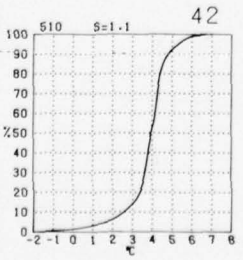












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INSUFFICIENT DATA

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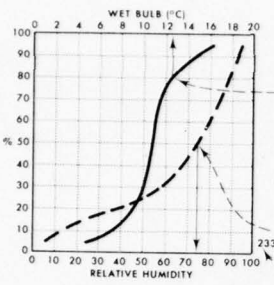
INSUFFICIENT DATA

45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



Wet bulb - Relative humidity

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(*80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.*)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

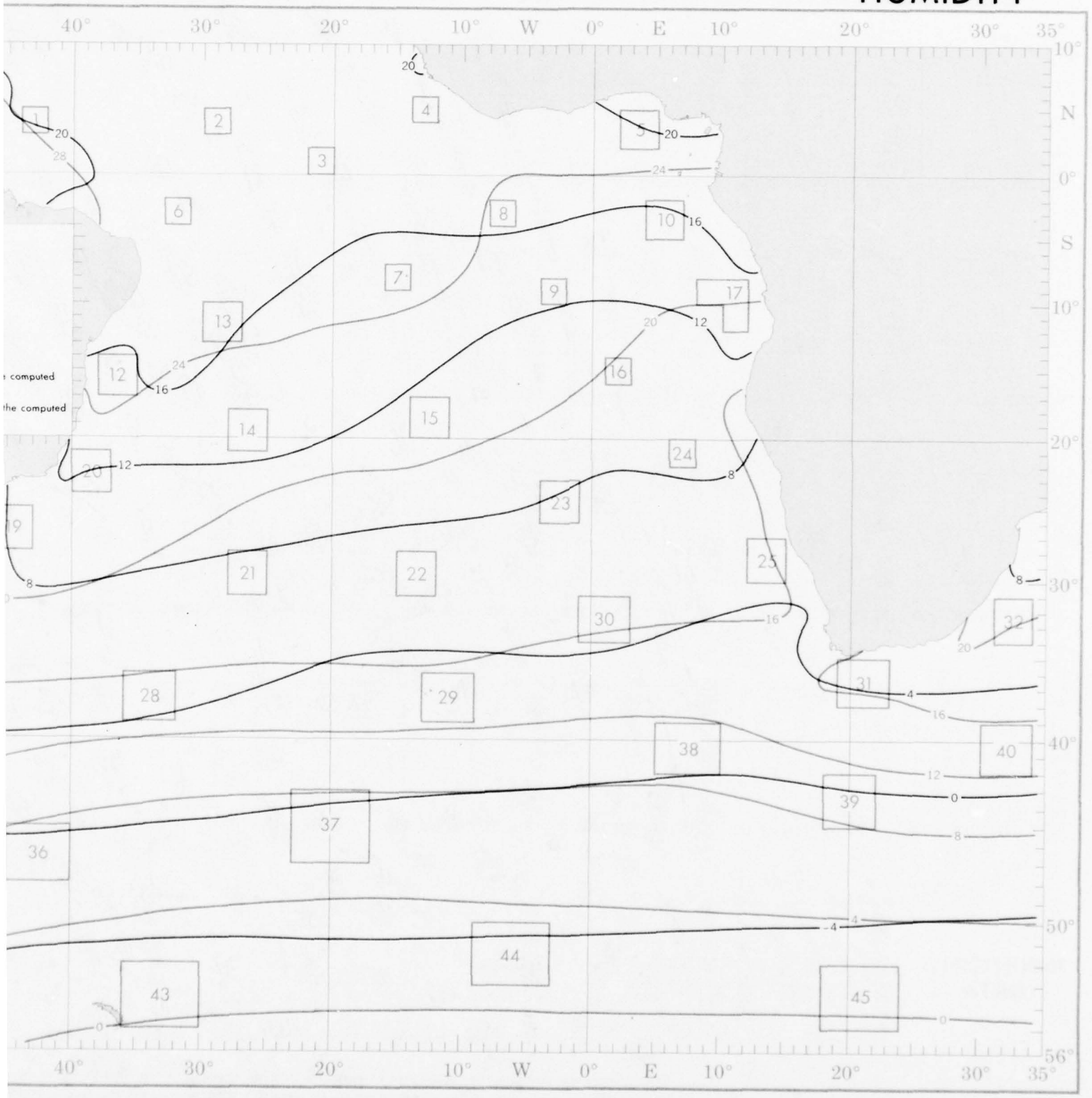
(*50% of all observed relative humidities were ≤74%.*)

Number of observations.

BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

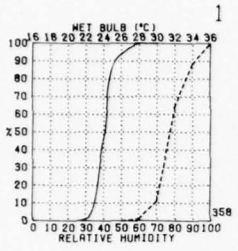
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

HUMIDITY

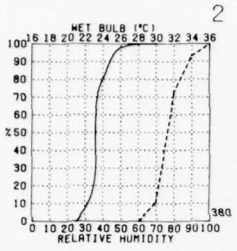

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 28 24 16 12 8 4 0 -4
computed
the computed

WET BULB AND RELATIVE HUMIDITY

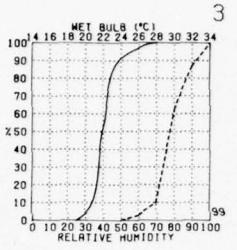
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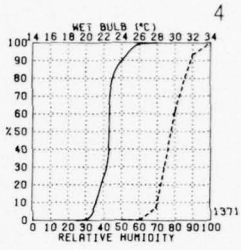
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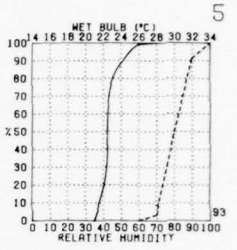
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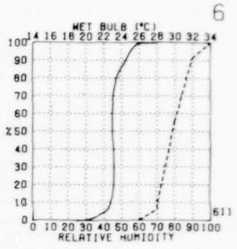
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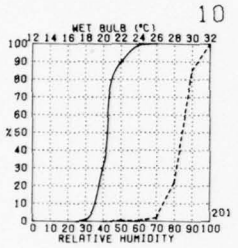
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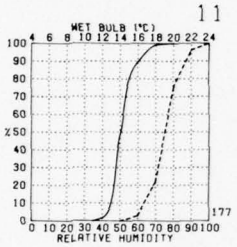
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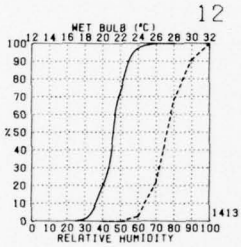
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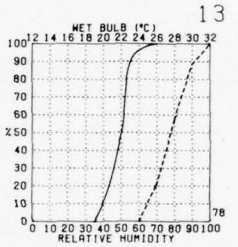
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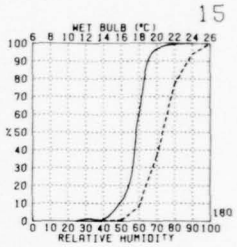
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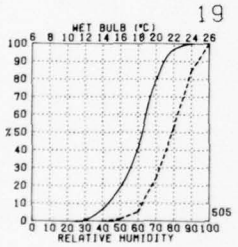
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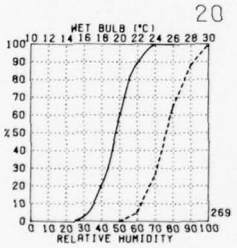
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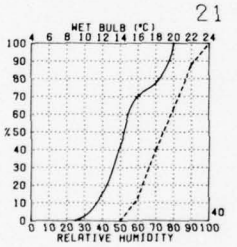
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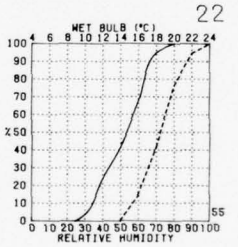
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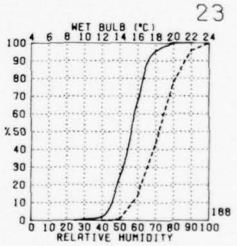
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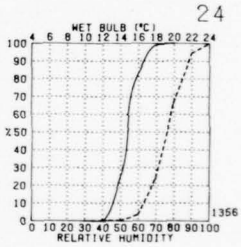
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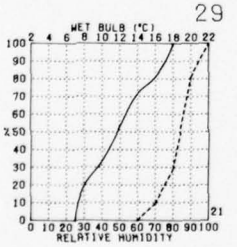
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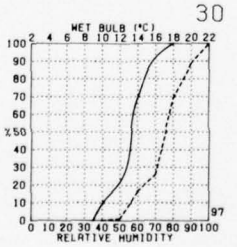
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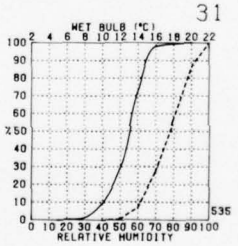
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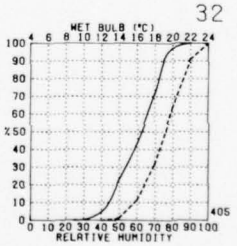
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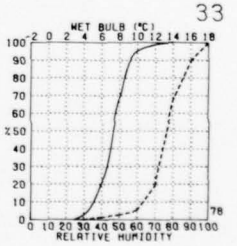
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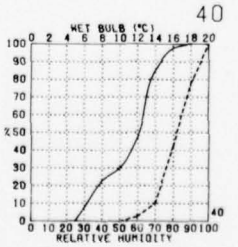
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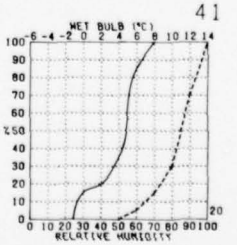
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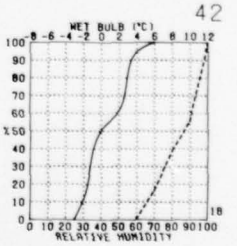
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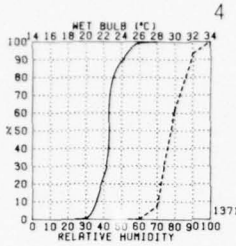
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Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

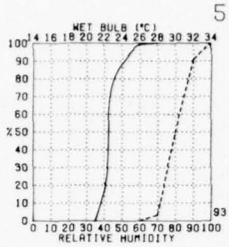
HUMIDITY

JULY

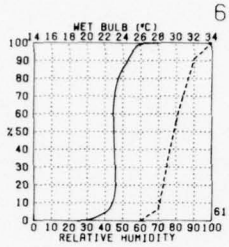
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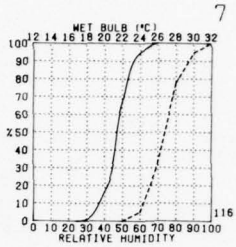
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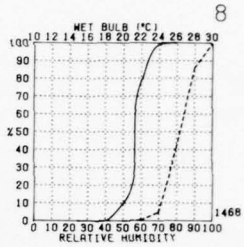
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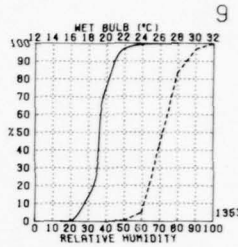
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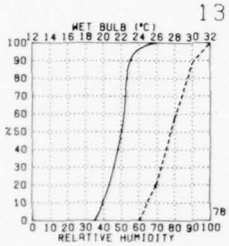
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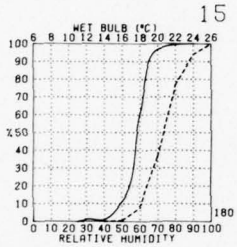
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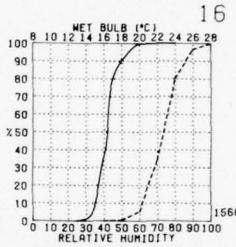
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INSUFFICIENT DATA

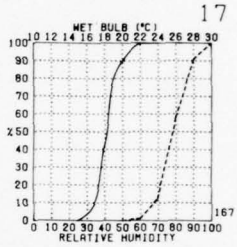
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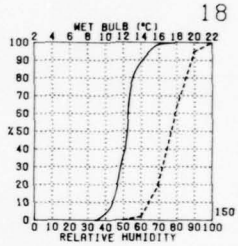
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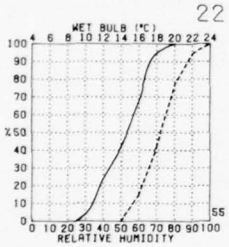
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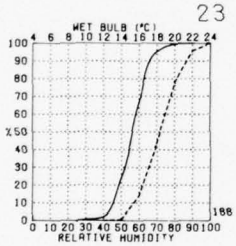
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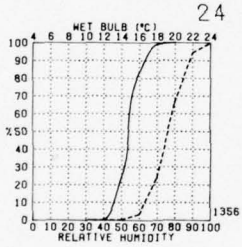
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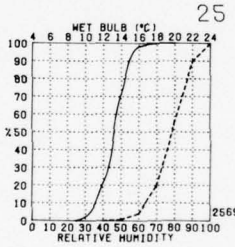
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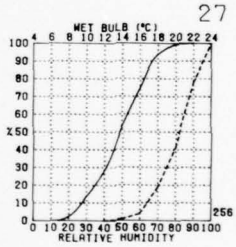
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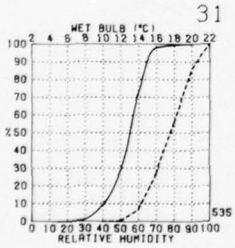
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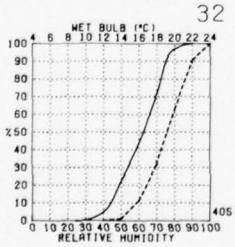
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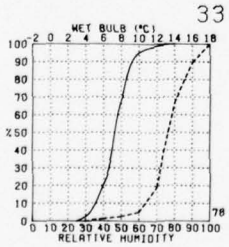
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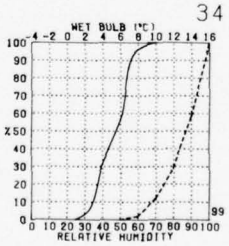
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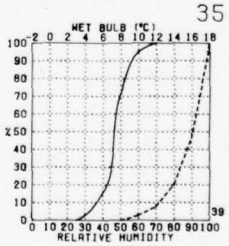
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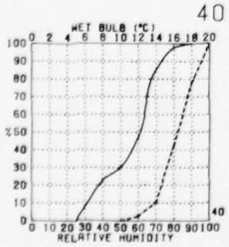
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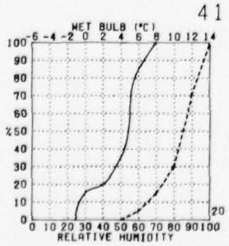
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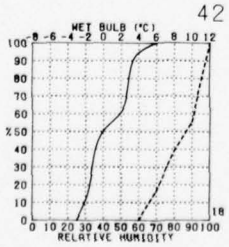
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42



43

INSUFFICIENT DATA

44

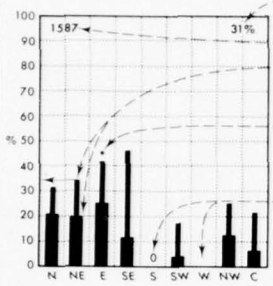
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

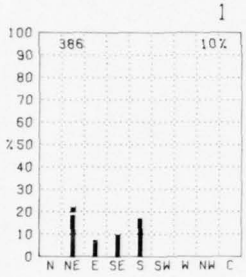
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

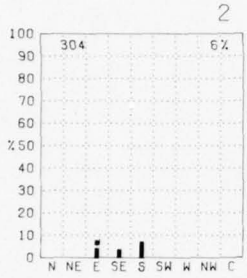
RED LINE - Percent frequency of observations reporting precipitation

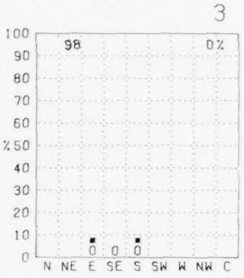
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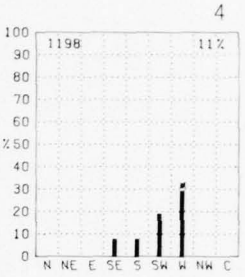


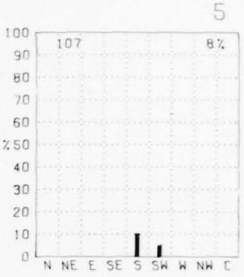
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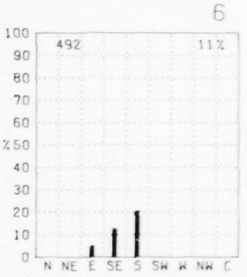


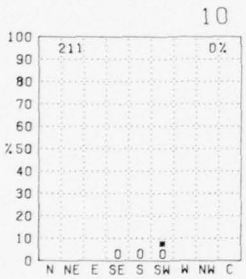


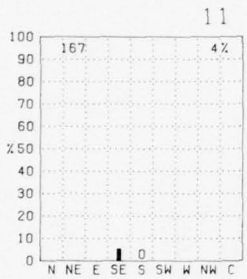


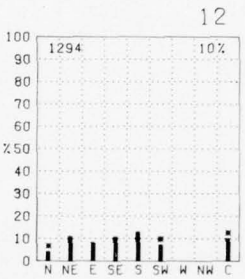


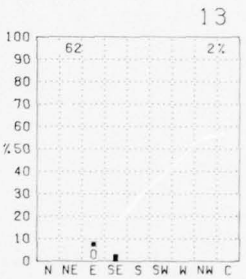






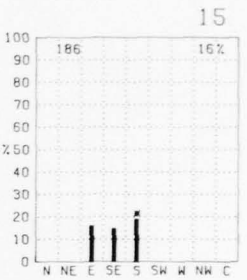


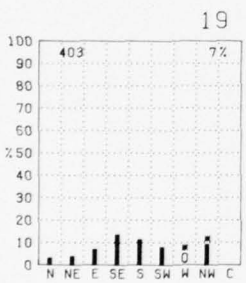


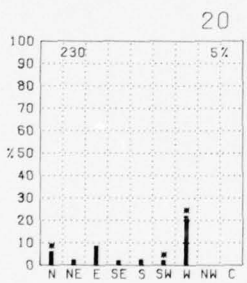


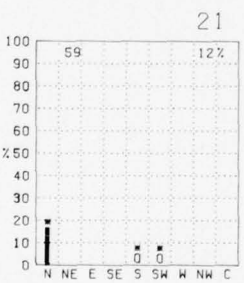
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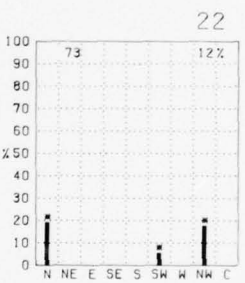
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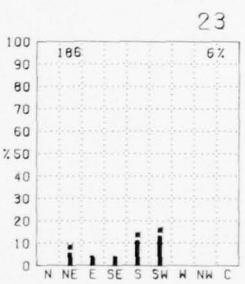


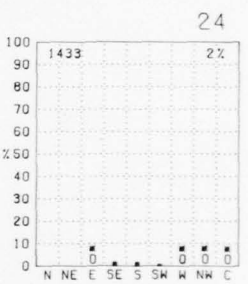






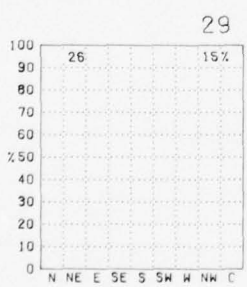


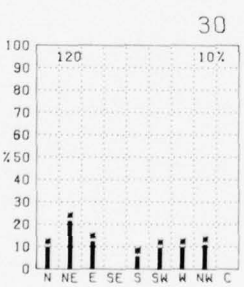


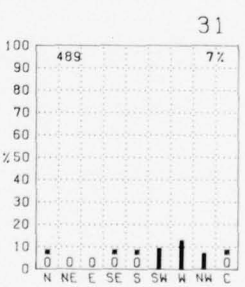


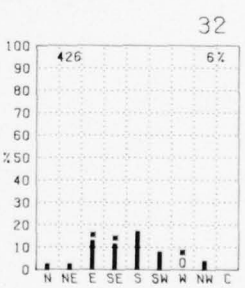
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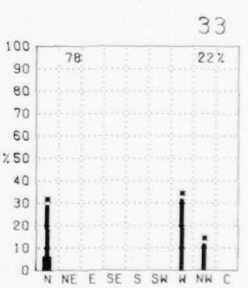
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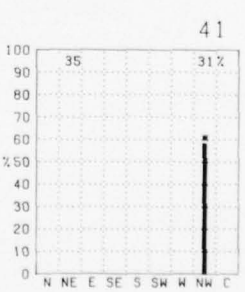
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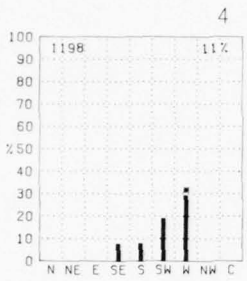
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Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

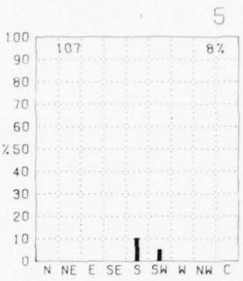
JULY



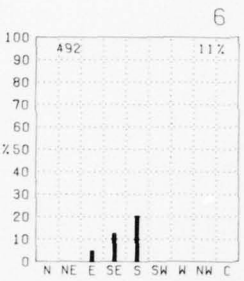
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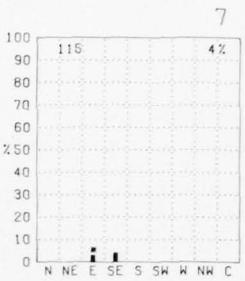
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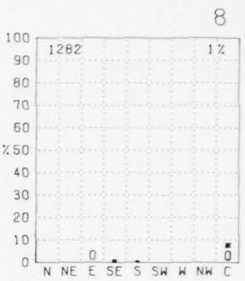
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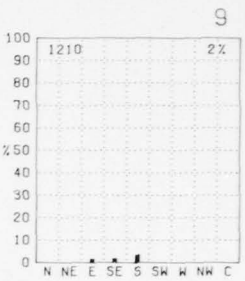
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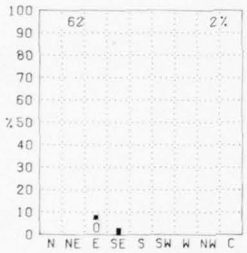
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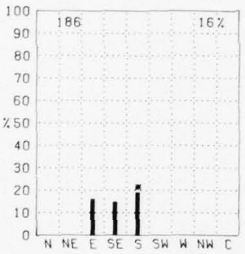
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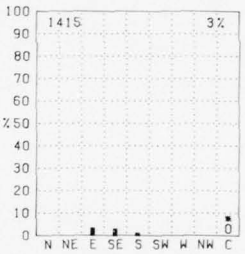
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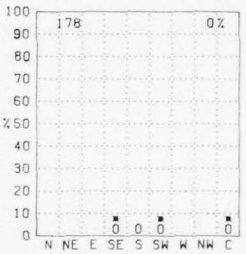
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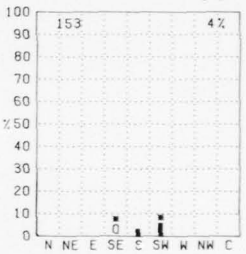
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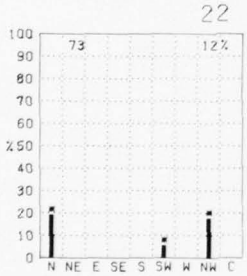
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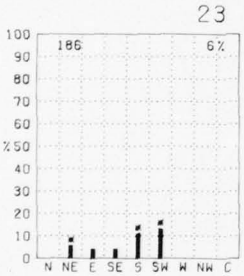
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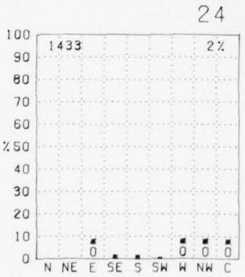
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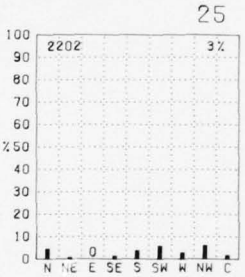
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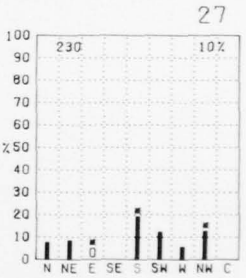
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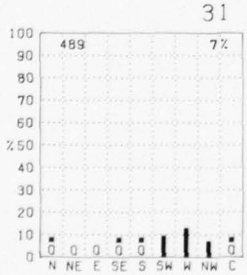
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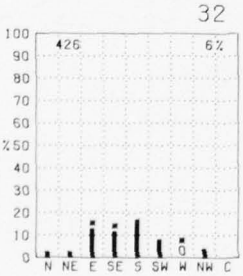
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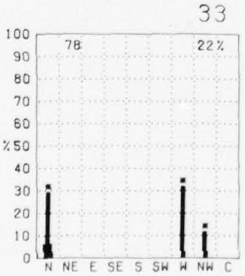
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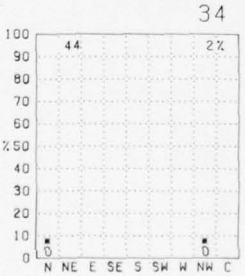
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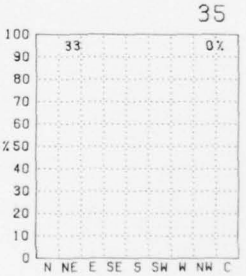
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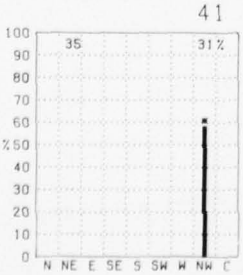
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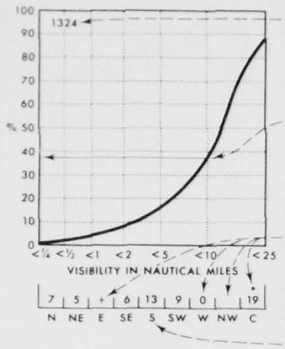
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INSUFFICIENT DATA

sent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

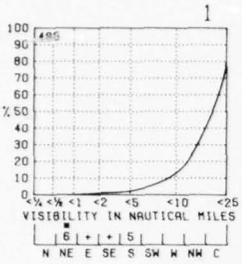
RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

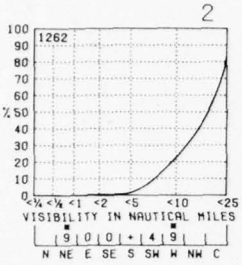

40°
30°
20°
10°
W
0°
E
10°
20°
30°
35°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
95
5
90
10
80
20
70
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d with winds
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ed on 10-30
2 nautical miles.)

VISIBILITY

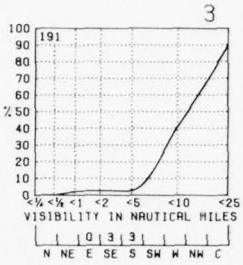
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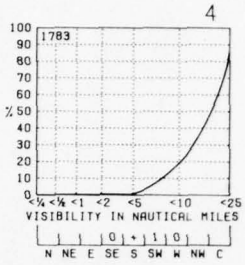
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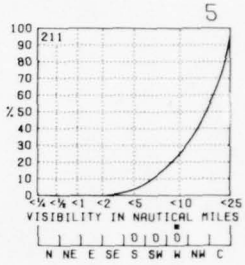
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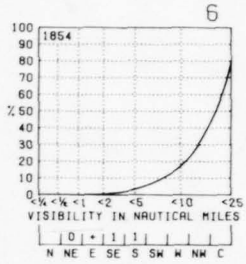
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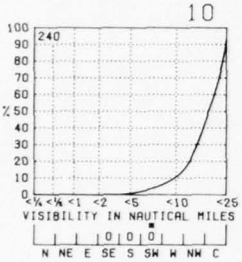
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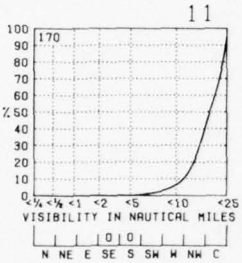
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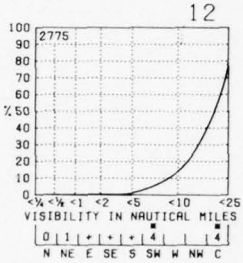
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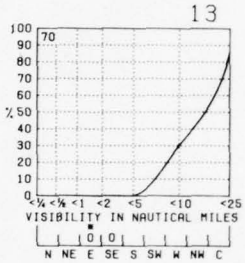
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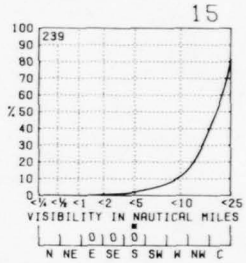
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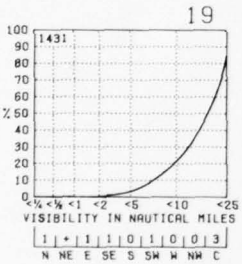
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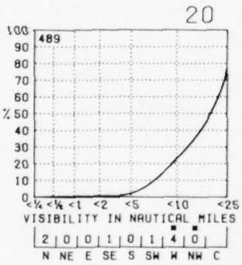
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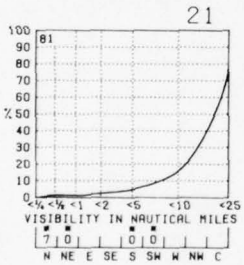
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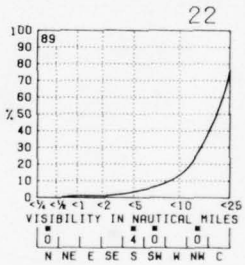
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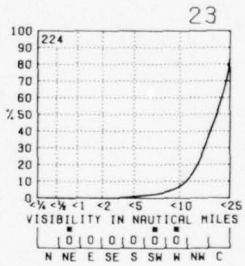
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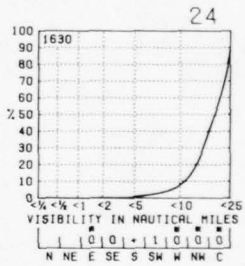
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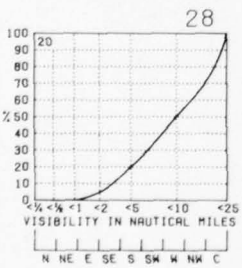
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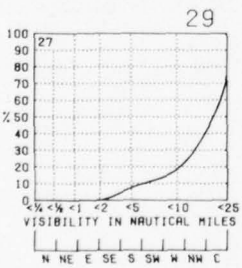
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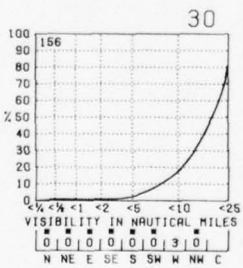
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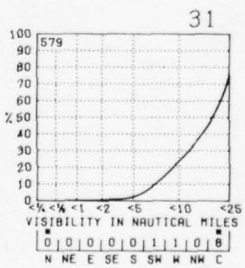
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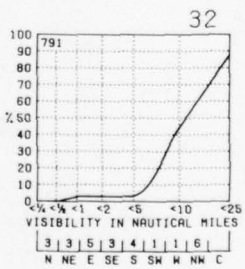
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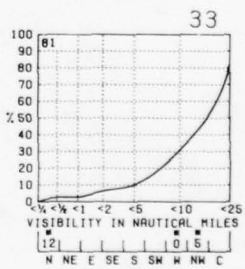
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INSUFFICIENT DATA

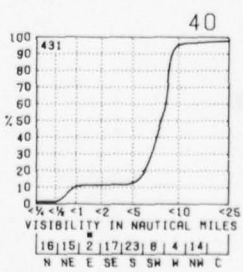
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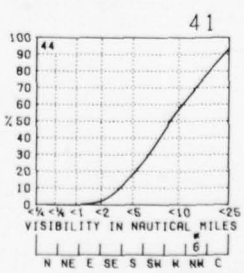
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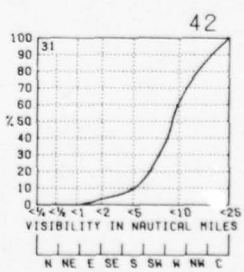
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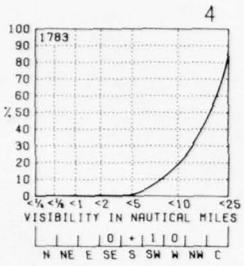


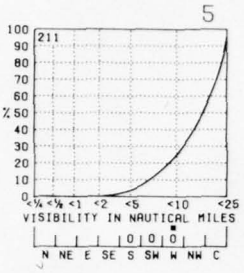
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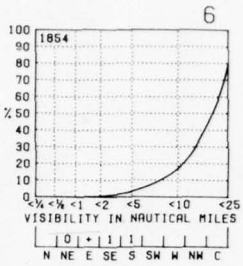


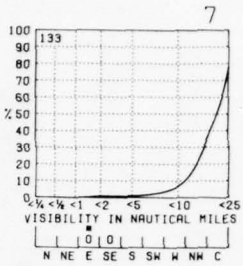
Graphs represent the objective compilation of available data for specified areas without regard to suspect
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

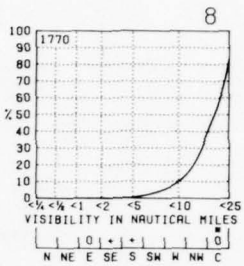
JULY

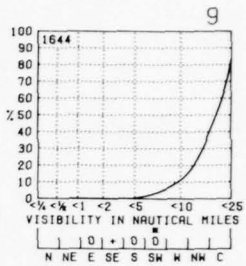


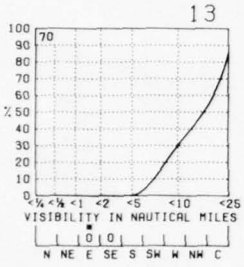






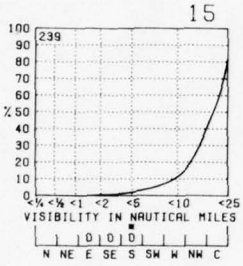


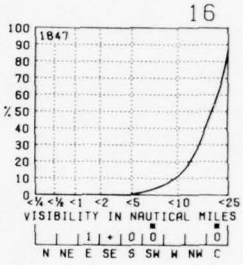


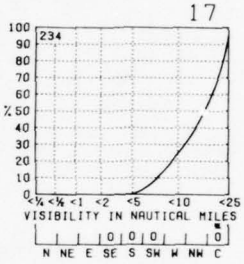


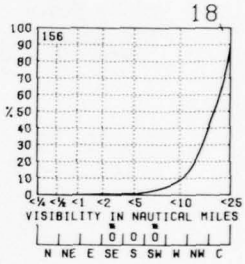
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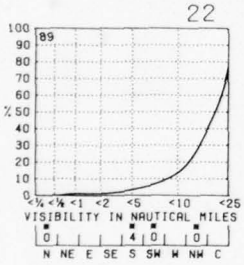
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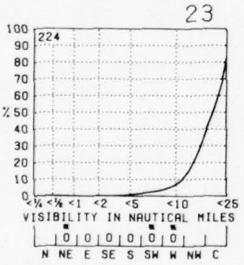


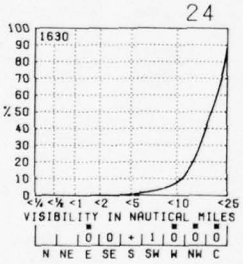


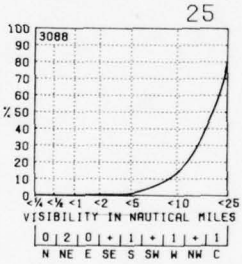






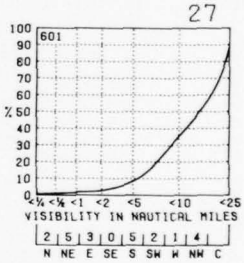


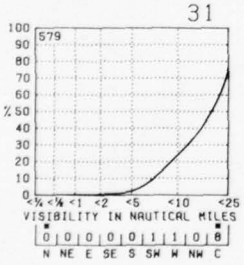


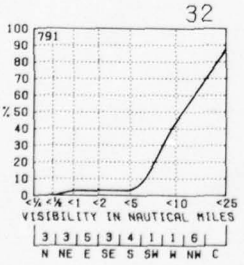


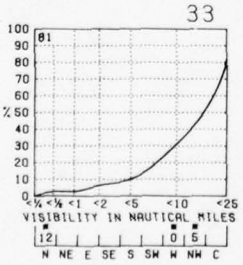
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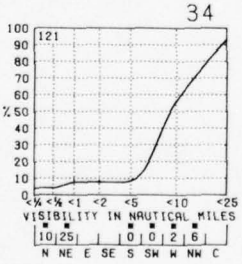
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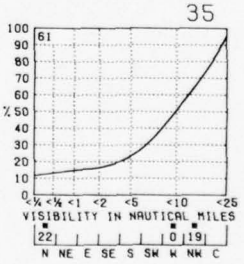


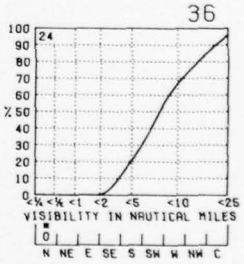


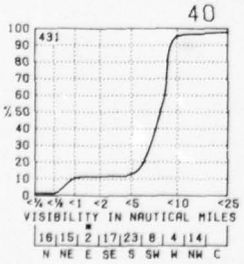


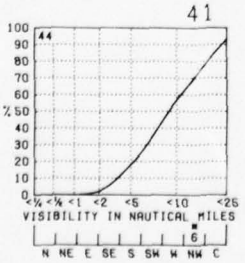


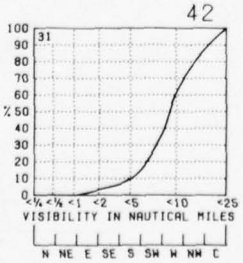












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INSUFFICIENT DATA

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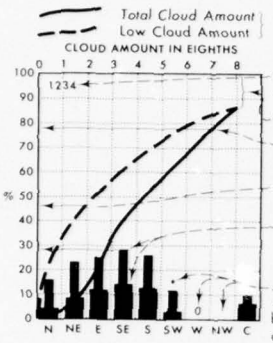
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

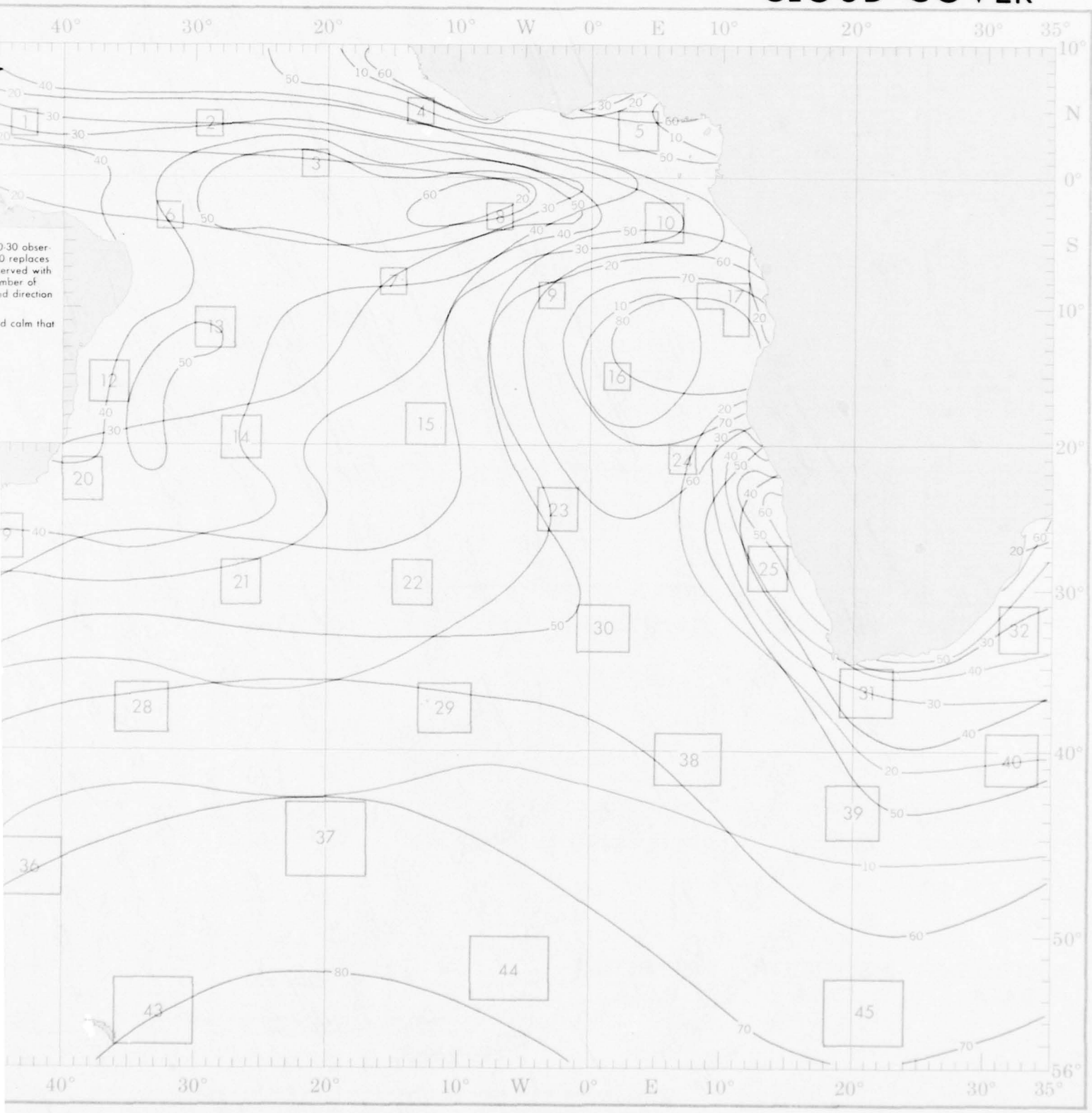


Low cloud amount. Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

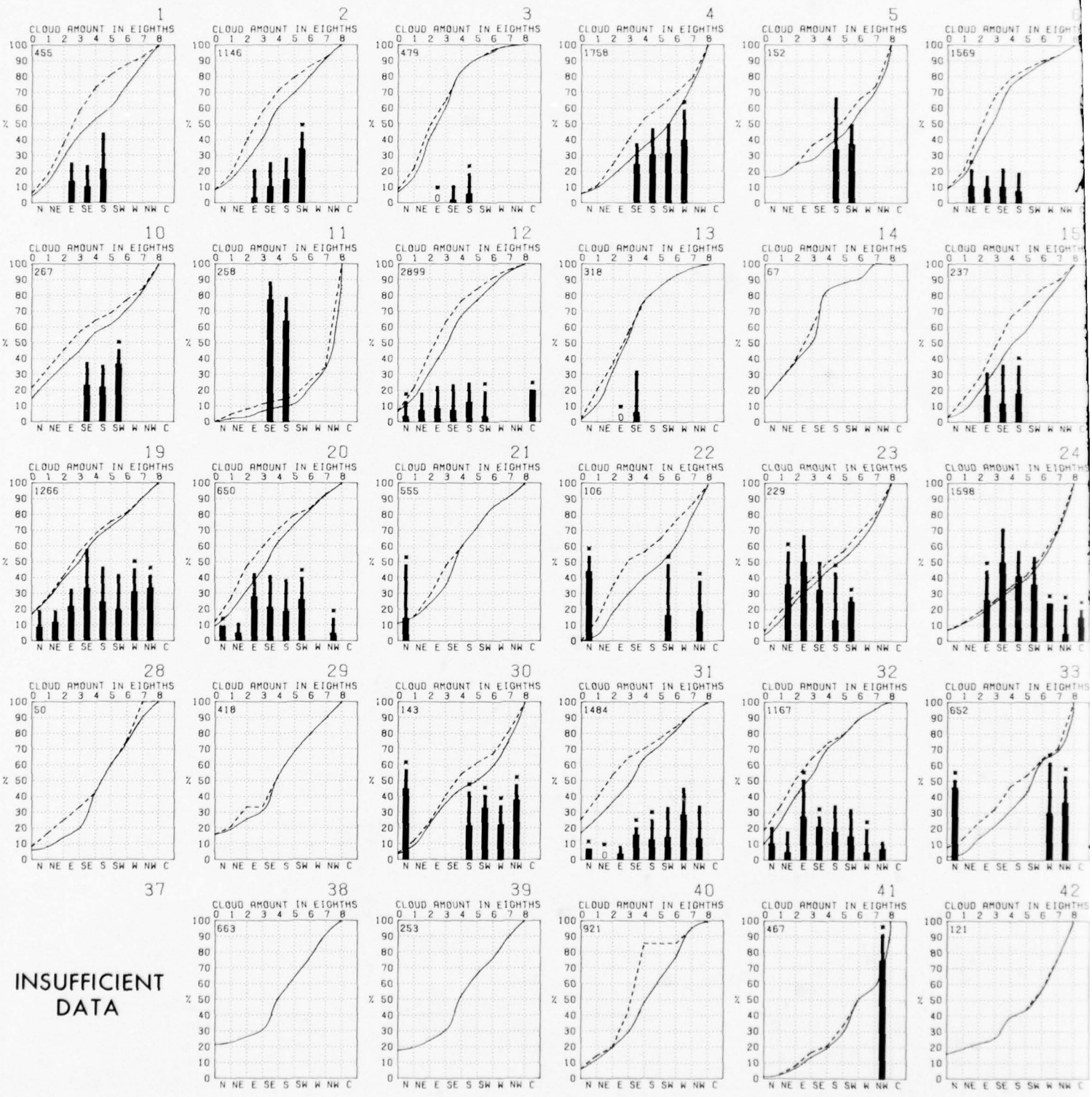
CLOUD COVER



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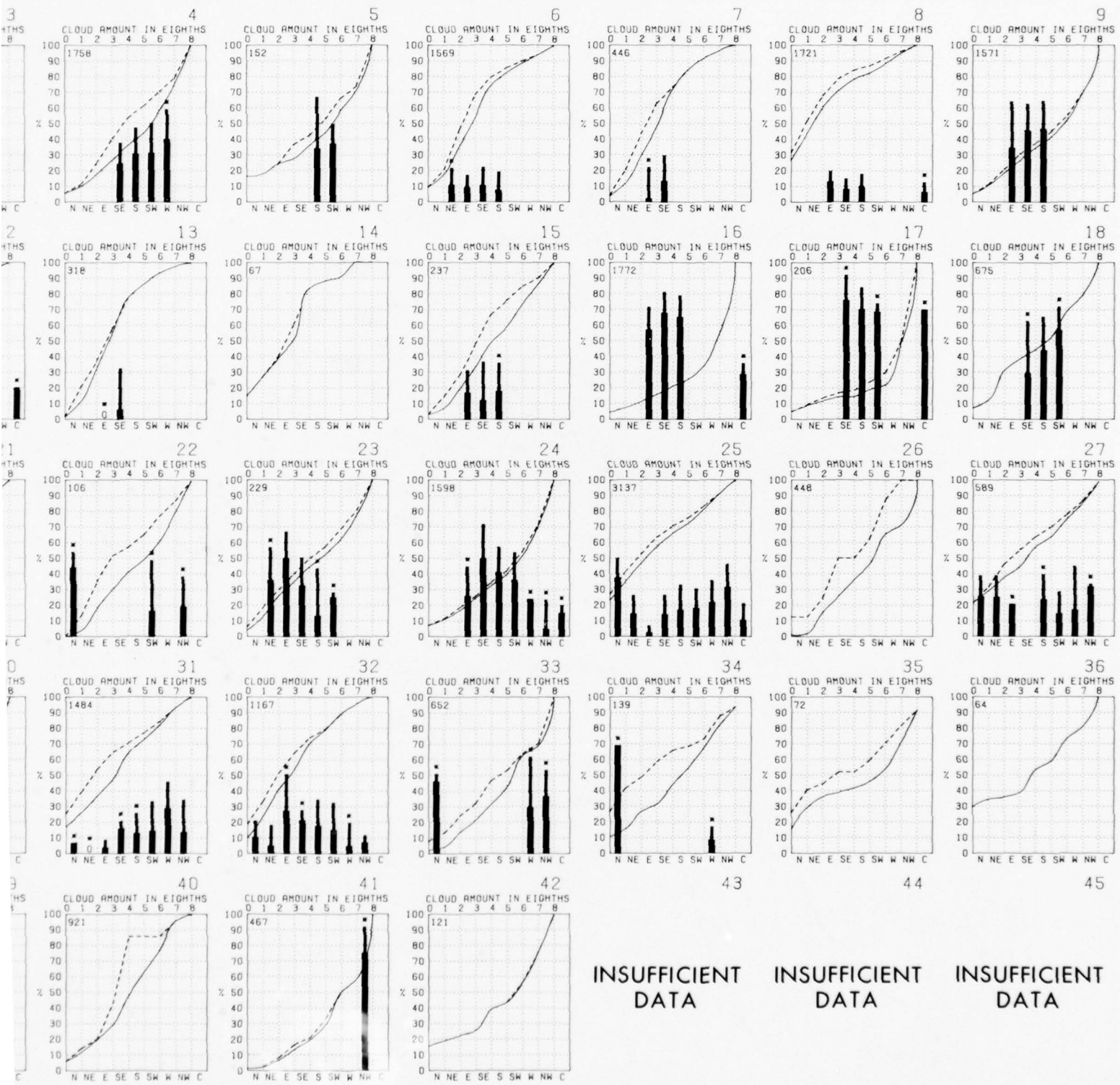
CLOUD COVER



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard
The isopleth analyses (opposite page) are based on all available data subjectively adjusted whe

JULY



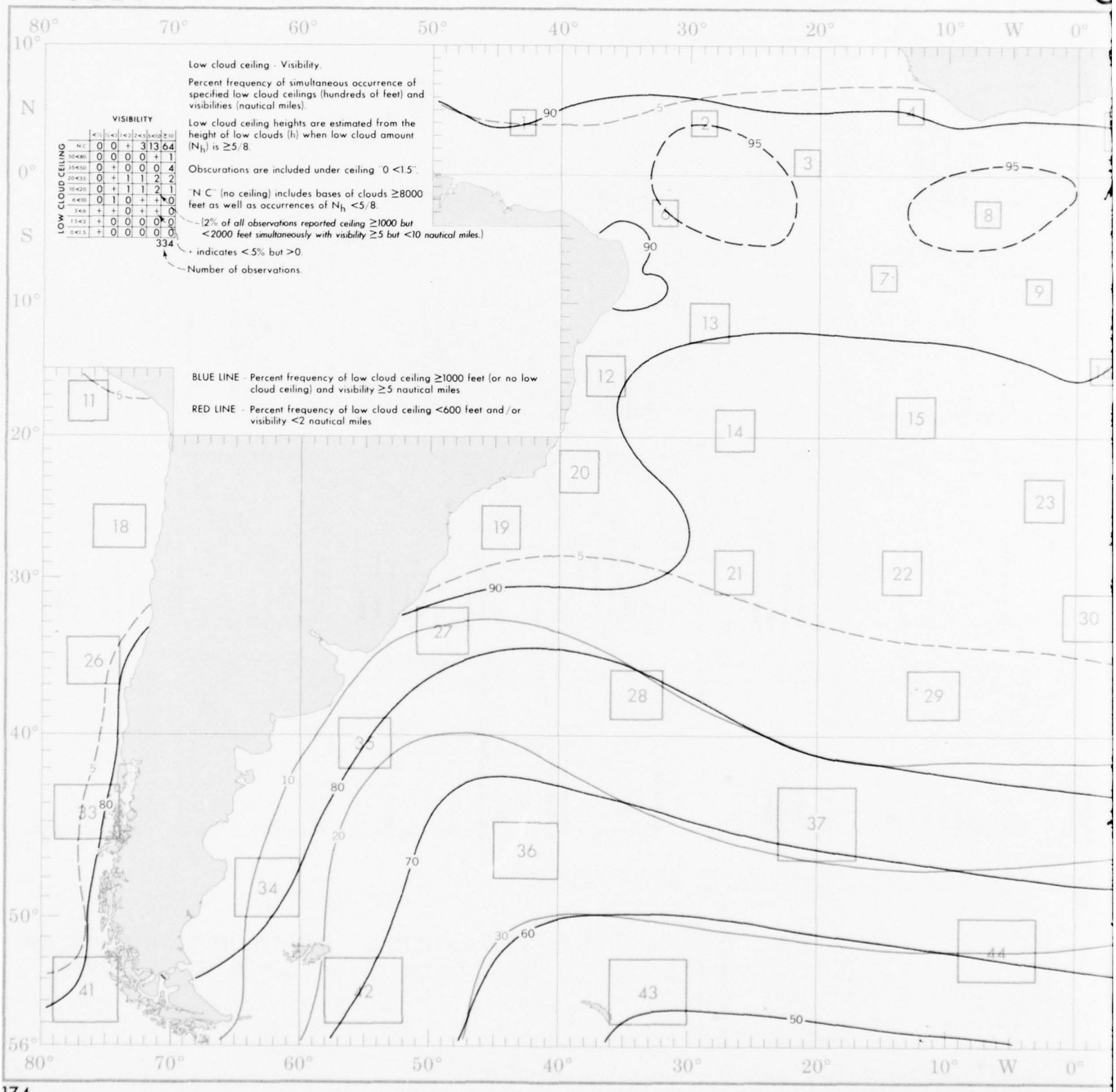
43 INSUFFICIENT DATA

44 INSUFFICIENT DATA

45 INSUFFICIENT DATA

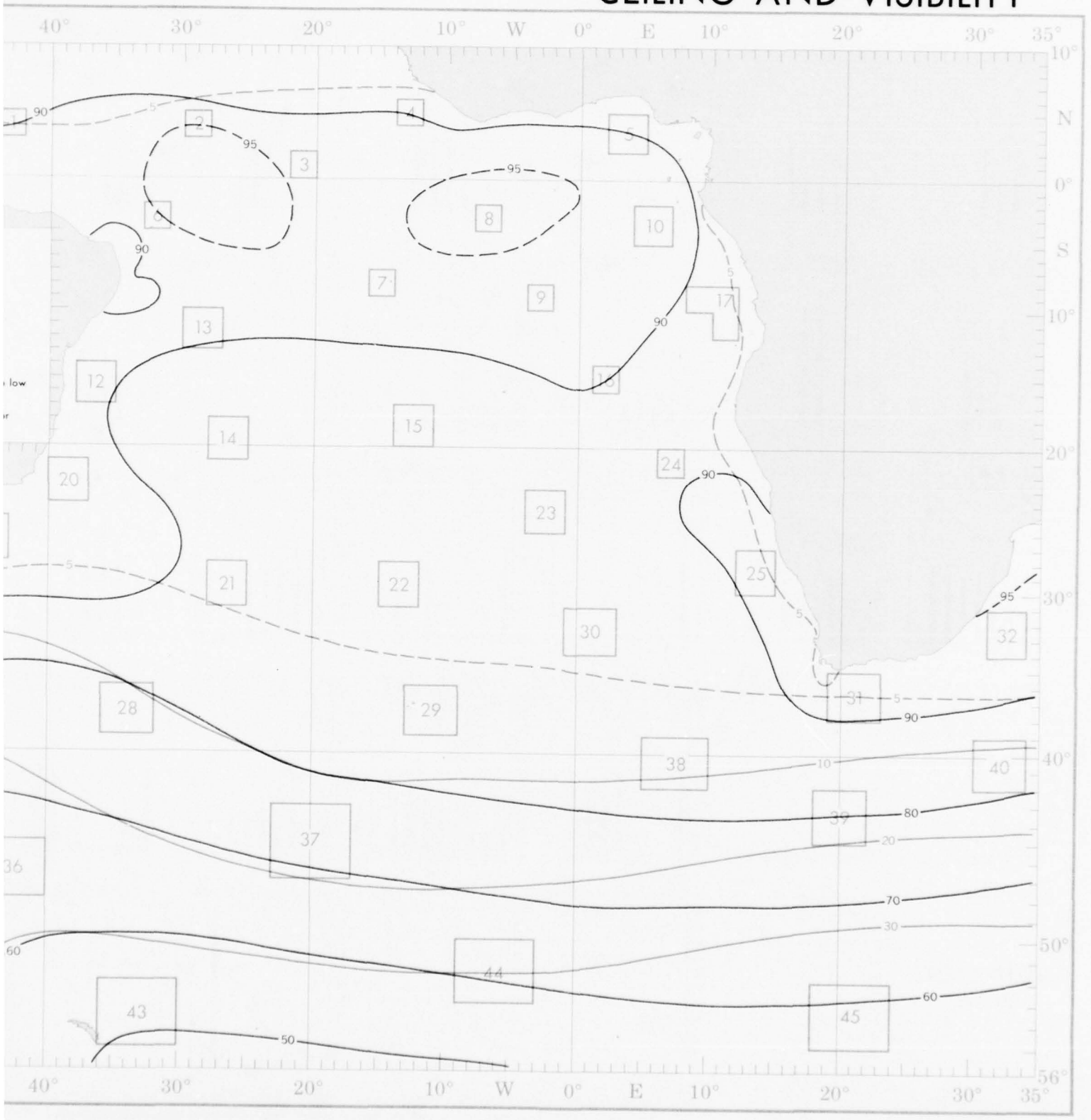
...t the objective compilation of available data for specified areas without regard to suspected biases.
...lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY



LOW CLOUD CEILING	<1	1<1	1<2	2<5	5<10	≥10
N C	0	0	+	3	13	64
50<80	0	0	0	0	+	1
35<50	0	+	0	0	0	4
20<35	0	+	1	1	2	2
10<20	0	+	1	1	2	1
6<10	0	1	0	+	+	0
3<6	+	+	0	+	+	0
1.5<3	+	0	0	0	0	0
0<1.5	+	0	0	0	0	0

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	72
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	4
10<20	0	0	0	1	1	9
6<10	0	0	0	1	1	3
3<6	0	0	0	+	1	2
1.5<3	0	0	0	0	0	+
0<1.5	0	+	+	0	0	0

370

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	69
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	2
20<35	0	0	0	1	1	6
10<20	0	0	0	0	1	9
6<10	0	0	+	+	1	4
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

344

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	82
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	1
10<20	0	0	0	0	0	10
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

89

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	52
50<80	0	0	0	0	+	1
35<50	+	0	0	0	+	4
20<35	0	0	0	+	1	10
10<20	0	0	+	+	2	17
6<10	0	+	0	+	1	7
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1217

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	39
50<80	0	0	0	0	1	0
35<50	0	0	0	0	2	3
20<35	0	0	0	0	2	14
10<20	0	0	0	0	3	20
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

100

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	76
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	4
10<20	0	0	0	0	1	6
6<10	0	0	0	+	1	2
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	+	+

542

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	61
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	3
20<35	0	0	0	0	2	6
10<20	0	0	0	0	2	14
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

197

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	14
50<80	0	0	0	0	0	0
35<50	0	0	0	0	2	6
20<35	0	0	0	0	1	19
10<20	0	0	0	0	1	44
6<10	0	0	0	0	0	9
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	1	0

135

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	76
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	2
20<35	+	0	0	0	1	3
10<20	0	0	0	+	1	8
6<10	0	0	0	+	1	4
3<6	+	0	0	+	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1384

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	61
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	4
20<35	0	0	0	0	2	4
10<20	0	0	0	0	6	8
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	4
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

51

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	63
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	5
10<20	0	0	0	0	4	11
6<10	0	0	0	0	2	7
3<6	0	0	0	1	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

187

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	6	60
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	2	7
10<20	0	0	0	+	3	10
6<10	0	0	+	0	1	3
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

425

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	64
50<80	0	0	0	+	+	1
35<50	0	0	0	+	1	3
20<35	0	0	0	1	2	4
10<20	0	0	0	0	3	7
6<10	0	0	0	+	1	4
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	+	0	0	0	0	0

233

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	5	46
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	5
10<20	0	0	0	0	3	27
6<10	0	0	0	3	5	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

37

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	5	8
10<20	0	0	0	0	0	19
6<10	0	0	0	0	3	3
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

59

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	46
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	8
10<20	0	0	0	0	1	24
6<10	0	0	0	1	0	13
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

190

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	33
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	4
20<35	0	0	0	0	1	18
10<20	0	0	0	0	2	28
6<10	0	0	0	+	1	9
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1345

28

INSUFFICIENT DATA

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	4	4	33
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	4
10<20	0	0	0	0	4	33
6<10	0	0	0	0	4	8
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	4	0	0

24

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	4	47
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	11
10<20	0	0	0	0	5	9
6<10	0	0	0	1	3	8
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

96

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	67
50<80	0	0	0	0	0	1
35<50	0	0	0	+	1	2
20<35	0	0	0	0	1	3
10<20	0	0	+	1	2	10
6<10	0	0	0	+	2	4
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

369

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	69
50<80	0	0	0	0	+	+
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	4
10<20	0	0	0	0	3	9
6<10	0	0	0	+	1	3
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	0

413

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	1	1	3	44
50<80	0	0	0	1	1	0
35<50	0	0	0	0	0	0
20<35	1	0	0	0	7	5
10<20	0	0	1	0	3	16
6<10	0	0	0	0	4	3
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	1	0
0<1.5	1	0	0	0	1	0

73

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	17
50<80	0	0	0	0	0	0
35<50	0	0	0	4	13	0
20<35	0	0	0	0	0	4
10<20	0	0	4	8	25	13
6<10	0	0	0	0	4	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

24

42

INSUFFICIENT DATA

INSU

Graphs represent the objective compilation of available data for specified areas without regard to suspect
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

JULY

4

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	2	52
80	0	0	0	0	+	1
50	+	0	0	0	+	4
35	0	0	0	+	1	10
20	0	0	+	+	2	17
10	0	+	0	+	1	7
6	0	0	0	0	+	1
3	0	0	0	0	0	+
1.5	0	0	0	0	0	0

1217

5

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	3	39
50–80	0	0	0	0	1	0
35–50	0	0	0	0	2	3
20–35	0	0	0	0	2	14
10–20	0	0	0	0	3	20
6–10	0	0	0	0	1	9
3–6	0	0	0	0	0	3
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

100

6

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	4	76
50–80	0	0	0	0	+	1
35–50	0	0	0	0	1	1
20–35	0	0	0	0	1	4
10–20	0	0	0	0	1	6
6–10	0	0	0	+	1	2
3–6	0	0	+	0	+	1
1.5–3	0	0	0	0	0	+
0–1.5	0	0	0	0	0	+

542

7

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	3	70
50–80	0	0	0	0	0	0
35–50	0	0	0	0	0	1
20–35	0	0	0	0	0	11
10–20	0	0	1	0	0	8
6–10	0	0	0	0	1	4
3–6	0	0	0	0	0	2
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

110

8

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	2	83
50–80	0	0	0	0	0	1
35–50	0	0	0	0	+	1
20–35	0	0	0	+	+	4
10–20	0	0	0	0	1	5
6–10	0	0	0	+	+	2
3–6	0	0	0	0	+	+
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

1335

9

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	1	37
50–80	0	0	0	0	0	2
35–50	0	0	0	0	+	6
20–35	0	0	0	0	2	17
10–20	0	0	0	+	1	26
6–10	0	0	0	0	+	8
3–6	0	0	0	0	0	+
1.5–3	0	0	0	0	0	+
0–1.5	0	0	0	0	0	+

1247

13

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	10	61
80	0	0	0	0	0	2
50	0	0	0	0	0	4
35	0	0	0	0	2	4
20	0	0	0	0	6	8
10	0	0	0	0	0	0
6	0	0	0	0	0	4
3	0	0	0	0	0	0
1.5	0	0	0	0	0	0

51

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	1	3	63
50–80	0	0	0	0	0	0
35–50	0	0	0	0	0	1
20–35	0	0	0	0	1	5
10–20	0	0	0	0	4	11
6–10	0	0	0	0	2	7
3–6	0	0	0	1	1	1
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

187

16

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	1	21
50–80	0	0	0	0	0	3
35–50	0	0	0	0	+	7
20–35	0	0	0	0	1	23
10–20	0	0	0	0	2	33
6–10	0	0	0	0	1	8
3–6	0	0	0	0	+	+
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	+	0	+

1431

17

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	3	16
50–80	0	0	0	0	1	2
35–50	0	0	0	0	0	2
20–35	0	0	0	0	11	21
10–20	0	0	0	0	2	30
6–10	0	0	0	0	2	10
3–6	0	0	0	0	0	0
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

174

18

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	4	31
50–80	0	0	0	0	0	0
35–50	0	0	0	0	2	2
20–35	0	0	0	0	1	15
10–20	0	0	0	0	0	34
6–10	0	0	0	0	1	7
3–6	0	0	1	0	0	1
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	1

134

22

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	0	56
80	0	0	0	0	0	0
50	0	0	0	0	0	3
35	0	0	0	0	5	8
20	0	0	0	0	0	19
10	0	0	0	0	3	3
6	0	0	0	2	0	0
3	0	0	0	0	0	0
1.5	0	0	0	0	0	0

59

23

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	2	48
50–80	0	0	0	0	0	1
35–50	0	0	0	0	0	2
20–35	0	0	0	0	1	8
10–20	0	0	0	0	1	24
6–10	0	0	0	1	0	13
3–6	0	0	0	0	0	0
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

190

24

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	2	33
50–80	0	0	0	0	0	1
35–50	0	0	0	0	+	4
20–35	0	0	0	0	1	18
10–20	0	0	0	+	2	28
6–10	0	0	0	+	1	9
3–6	0	0	0	+	+	1
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

1345

25

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	+	1	4	67
50–80	0	0	0	+	+	1
35–50	0	0	0	0	+	2
20–35	0	0	0	0	1	7
10–20	0	0	0	+	1	12
6–10	0	+	0	+	+	4
3–6	0	0	0	0	0	+
1.5–3	0	0	0	0	+	0
0–1.5	0	0	0	+	0	0

2268

26

INSUFFICIENT DATA

27

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	4	61
50–80	0	0	0	0	+	2
35–50	0	0	0	1	1	3
20–35	0	0	0	0	1	5
10–20	0	0	0	+	6	7
6–10	0	0	0	1	2	3
3–6	0	0	0	0	0	+
1.5–3	0	0	0	+	0	0
0–1.5	+	0	0	0	0	0

219

31

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	5	67
80	0	0	0	0	0	1
50	0	0	0	+	1	2
35	0	0	0	0	1	3
20	0	0	+	1	2	10
10	0	0	0	+	2	4
6	0	0	0	+	+	+
3	0	0	0	0	0	0
1.5	0	0	0	0	0	0

369

32

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	5	69
50–80	0	0	0	0	+	+
35–50	0	0	0	0	0	2
20–35	0	0	0	0	1	4
10–20	0	0	0	0	3	9
6–10	0	0	0	0	1	3
3–6	0	0	0	0	+	1
1.5–3	0	0	0	0	+	0
0–1.5	0	0	0	0	0	0

413

33

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	1	1	3	44
50–80	0	0	0	1	1	0
35–50	0	0	0	0	0	0
20–35	1	0	0	0	7	5
10–20	0	0	1	0	3	16
6–10	0	0	0	0	4	3
3–6	0	0	0	0	1	1
1.5–3	0	0	0	0	1	0
0–1.5	1	0	0	0	1	0

73

34

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	0	73
50–80	0	0	0	0	0	8
35–50	0	0	0	0	0	3
20–35	0	0	0	0	0	5
10–20	0	0	0	0	5	3
6–10	0	0	0	0	0	0
3–6	0	0	0	0	0	0
1.5–3	0	0	0	0	3	0
0–1.5	3	0	0	0	0	0

40

35

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	8	48
50–80	0	0	0	0	0	8
35–50	0	0	0	0	4	12
20–35	0	0	0	0	0	8
10–20	0	0	0	0	0	4
6–10	0	0	0	4	0	0
3–6	0	0	0	0	0	0
1.5–3	0	0	0	0	0	0
0–1.5	4	0	0	0	0	0

25

36

INSUFFICIENT DATA

40

SUFFICIENT DATA

41

LOW CLOUD CEILING \ VISIBILITY	<½	½–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	4	17
50–80	0	0	0	0	0	0
35–50	0	0	0	4	13	0
20–35	0	0	0	0	0	4
10–20	0	0	4	8	25	13
6–10	0	0	0	0	4	4
3–6	0	0	0	0	0	0
1.5–3	0	0	0	0	0	0
0–1.5	0	0	0	0	0	0

24

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

45

INSUFFICIENT DATA

ective compilation of available data for specified areas without regard to suspected biases.
posite page) are based on all available data subjectively adjusted where bias was evident.

JULY

Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.

Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.

WIND SPEED (knots)

LCC \ Vsby	0-3	4-10	11-21	22-33	≥34
<1.5 & or <.5	+	1	1	+	0
<6 & or <2	2	2	1	1	+
Vsby <2	1	2	1	1	+
<10 & or <2	3	4	2	1	1
<20 & or <5	8	9	6	5	2
Vsby ≥5	9	11	12	3	1
≥30 & ≥5	12	13	15	7	3
N C & ≥10	4	2	1	+	0

1234 ← Number of observations.

(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)

"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.

+ indicates <.5% but >0.

Conditions for Carrier Operations

BLUE LINE - *Percent frequency of optimum conditions.* LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.

RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.

Satisfactory conditions between poor and optimum

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	2	2	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	4	4	+	0
<20 & OR <5	2	11	7	+	0
VSBY ≥5	7	51	39	1	0
≥50 & ≥5	5	39	31	+	0
NC & ≥ 10	5	36	30	+	0

366

2

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	4	1	0	0
<20 & OR <5	2	10	5	1	0
VSBY ≥5	4	54	40	1	0
≥50 & ≥5	3	38	32	0	0
NC & ≥ 10	3	37	30	0	0

341

3

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	1	3	0	0
<20 & OR <5	2	6	8	0	0
VSBY ≥5	4	44	51	1	0
≥50 & ≥5	2	38	42	1	0
NC & ≥ 10	1	38	42	1	0

89

4

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	6	+	0
<20 & OR <5	+	9	18	1	+
VSBY ≥5	2	41	54	2	+
≥50 & ≥5	1	26	27	1	0
NC & ≥ 10	1	24	26	1	0

1215

5

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	9	0	0
<20 & OR <5	0	13	22	1	0
VSBY ≥5	0	50	48	2	0
≥50 & ≥5	0	30	13	0	0
NC & ≥ 10	0	27	12	0	0

100

6

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	2	3	0	0
<20 & OR <5	+	5	8	0	0
VSBY ≥5	1	43	53	3	0
≥50 & ≥5	1	36	42	2	0
NC & ≥ 10	1	34	43	2	0

540

10

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	2	0	0
<20 & OR <5	2	16	4	0	0
VSBY ≥5	14	68	19	0	0
≥50 & ≥5	11	45	12	0	0
NC & ≥ 10	9	42	11	0	0

197

11

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	7	0	0
<20 & OR <5	3	20	33	1	0
VSBY ≥5	4	37	56	3	0
≥50 & ≥5	1	7	6	0	0
NC & ≥ 10	1	7	6	0	0

135

12

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	+	1	+	0
VSBY <2	+	0	+	0	0
<10 & OR <2	+	2	3	1	0
<20 & OR <5	+	6	8	1	+
VSBY ≥5	3	45	46	5	+
≥50 & ≥5	3	37	36	3	+
NC & ≥ 10	3	36	34	3	+

1376

13

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	4	0	0
<20 & OR <5	0	0	16	2	0
VSBY ≥5	2	12	80	6	0
≥50 & ≥5	2	12	55	4	0
NC & ≥ 10	2	10	47	2	0

51

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	5	2	0
<20 & OR <5	1	9	15	3	0
VSBY ≥5	2	32	52	12	1
≥50 & ≥5	1	21	34	9	1
NC & ≥ 10	1	21	32	9	0

185

19

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	+	0
<10 & OR <2	+	2	3	1	0
<20 & OR <5	+	8	9	4	+
VSBY ≥5	4	38	46	8	1
≥50 & ≥5	3	25	34	5	+
NC & ≥ 10	3	23	30	4	+

421

20

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	1	5	+	0
<20 & OR <5	1	6	11	1	0
VSBY ≥5	4	39	49	4	+
≥50 & ≥5	3	30	35	3	+
NC & ≥ 10	3	29	30	2	+

227

21

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	3	3	0
<20 & OR <5	0	19	16	8	0
VSBY ≥5	0	41	32	22	0
≥50 & ≥5	0	22	16	14	0
NC & ≥ 10	0	19	14	14	0

37

22

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	3	0	0
<20 & OR <5	0	15	7	5	0
VSBY ≥5	5	44	37	12	0
≥50 & ≥5	5	25	20	5	0
NC & ≥ 10	5	25	20	5	0

59

23

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	7	2	0
<20 & OR <5	2	13	21	3	0
VSBY ≥5	11	42	41	4	1
≥50 & ≥5	9	24	16	1	0
NC & ≥ 10	8	23	16	1	0

188

24

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	2	+
<20 & OR <5	1	13	22	6	1
VSBY ≥5	6	31	50	12	1
≥50 & ≥5	4	12	16	3	+
NC & ≥ 10	4	12	15	2	+

1336

28

INSUFFICIENT DATA

29

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	4	0	0	0
<6 & OR <2	0	4	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	13	0	4	0
<20 & OR <5	0	33	21	4	0
VSBY ≥5	4	38	46	4	0
≥50 & ≥5	4	8	25	0	0
NC & ≥ 10	4	8	21	0	0

24

30

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	1	0	0
<6 & OR <2	0	1	2	1	0
VSBY <2	0	1	0	0	0
<10 & OR <2	0	6	10	1	0
<20 & OR <5	1	15	13	2	1
VSBY ≥5	5	49	33	9	1
≥50 & ≥5	4	26	15	6	0
NC & ≥ 10	4	23	15	5	0

94

31

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	2	2	3	0
<20 & OR <5	1	4	7	6	3
VSBY ≥5	11	31	37	15	5
≥50 & ≥5	9	26	27	9	2
NC & ≥ 10	9	25	26	7	1

363

32

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	2	2	+
<20 & OR <5	+	5	7	5	1
VSBY ≥5	3	35	42	18	2
≥50 & ≥5	2	27	33	12	1
NC & ≥ 10	2	25	30	11	1

409

33

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	3	0
<6 & OR <2	1	0	3	5	1
VSBY <2	1	0	0	4	0
<10 & OR <2	1	0	8	7	1
<20 & OR <5	1	5	12	19	1
VSBY ≥5	3	21	25	41	3
≥50 & ≥5	3	16	12	16	0
NC & ≥ 10	3	16	11	14	0

73

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

WIND SPEED (KNOTS)

LCC – VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	4
VSBY <2	0	0	0	0	4
<10 & OR <2	0	0	4	4	4
<20 & OR <5	0	0	8	33	21
VSBY ≥5	0	13	21	38	13
≥50 & ≥5	0	8	13	0	0
NC & ≥ 10	0	8	8	0	0

24

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

IBILITY-WIND

JULY

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	6	+	0
<20 & OR <5	+	9	18	1	+
VSBY ≥5	2	41	54	2	+
≥50 & ≥5	1	26	27	1	0
NC & ≥10	1	24	26	1	0

1215

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	9	0	0
<20 & OR <5	0	13	22	1	0
VSBY ≥5	0	50	48	2	0
≥50 & ≥5	0	30	13	0	0
NC & ≥10	0	27	12	0	0

100

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	2	3	0	0
<20 & OR <5	+	5	8	0	0
VSBY ≥5	1	43	53	3	0
≥50 & ≥5	1	36	42	2	0
NC & ≥10	1	34	40	2	0

540

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	3	5	0	0
<20 & OR <5	0	4	11	1	0
VSBY ≥5	0	28	64	7	0
≥50 & ≥5	0	21	45	5	0
NC & ≥10	0	20	45	5	0

110

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	1	0	0
<20 & OR <5	1	5	2	0	0
VSBY ≥5	5	64	31	1	0
≥50 & ≥5	4	55	27	1	0
NC & ≥10	3	54	26	1	0

1327

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	5	+	0
<20 & OR <5	+	13	22	+	0
VSBY ≥5	1	40	57	3	0
≥50 & ≥5	+	16	22	1	0
NC & ≥10	+	15	20	1	0

1241

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	4	0	0
<20 & OR <5	0	0	16	2	0
VSBY ≥5	2	12	80	6	0
≥50 & ≥5	2	12	55	4	0
NC & ≥10	2	10	47	2	0

51

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	5	2	0
<20 & OR <5	1	9	15	3	0
VSBY ≥5	2	32	52	12	1
≥50 & ≥5	1	21	34	9	1
NC & ≥10	1	21	32	9	0

185

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	+	0
<20 & OR <5	1	18	25	1	0
VSBY ≥5	3	39	53	4	0
≥50 & ≥5	2	9	12	1	0
NC & ≥10	2	8	10	1	0

1421

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	8	3	0	0
<20 & OR <5	5	33	7	0	0
VSBY ≥5	12	72	16	0	0
≥50 & ≥5	3	15	2	0	0
NC & ≥10	2	11	1	0	0

171

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	1	2	0	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	5	4	1	0
<20 & OR <5	4	17	23	1	0
VSBY ≥5	8	38	48	5	0
≥50 & ≥5	3	14	14	5	0
NC & ≥10	2	14	12	3	0

133

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	3	0	0
<20 & OR <5	0	15	7	5	0
VSBY ≥5	5	44	37	12	0
≥50 & ≥5	5	25	20	5	0
NC & ≥10	5	25	20	5	0

59

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	7	2	0
<20 & OR <5	2	13	21	3	0
VSBY ≥5	11	42	41	4	1
≥50 & ≥5	9	24	16	1	0
NC & ≥10	8	23	16	1	0

188

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	2	+
<20 & OR <5	1	13	22	6	1
VSBY ≥5	6	31	50	12	1
≥50 & ≥5	4	12	16	3	+
NC & ≥10	4	12	15	2	+

1336

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	0	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	+	+	0	+	0
<10 & OR <2	+	2	2	1	0
<20 & OR <5	1	8	7	2	+
VSBY ≥5	8	40	36	13	2
≥50 & ≥5	7	29	25	10	1
NC & ≥10	6	27	24	9	1

2251

26

INSUFFICIENT DATA

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	0	3	3	1	0
<20 & OR <5	1	5	12	4	0
VSBY ≥5	3	31	49	13	1
≥50 & ≥5	2	25	33	6	0
NC & ≥10	2	23	30	6	0

216

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	2	2	3	0
<20 & OR <5	1	4	7	5	3
VSBY ≥5	11	31	37	15	5
≥50 & ≥5	9	26	27	9	2
NC & ≥10	9	25	26	7	1

363

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	2	2	+
<20 & OR <5	+	5	7	5	1
VSBY ≥5	3	35	42	18	2
≥50 & ≥5	2	27	33	12	1
NC & ≥10	2	25	30	11	1

409

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	3	0
<6 & OR <2	1	0	3	5	1
VSBY <2	1	0	0	4	0
<10 & OR <2	1	0	8	7	1
<20 & OR <5	1	5	12	19	1
VSBY ≥5	3	21	25	41	3
≥50 & ≥5	3	16	12	16	0
NC & ≥10	3	16	11	14	0

73

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	3	0	0	0	0
<6 & OR <2	3	3	0	0	0
VSBY <2	3	0	0	0	0
<10 & OR <2	3	3	0	0	0
<20 & OR <5	3	3	5	3	0
VSBY ≥5	0	23	53	23	0
≥50 & ≥5	0	20	40	20	0
NC & ≥10	0	18	40	15	0

40

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	4	0
<6 & OR <2	0	0	0	4	0
VSBY <2	0	0	0	4	0
<10 & OR <2	0	0	4	4	0
<20 & OR <5	0	0	4	4	4
VSBY ≥5	12	32	32	12	4
≥50 & ≥5	4	28	28	4	0
NC & ≥10	4	20	20	4	0

25

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	4
VSBY <2	0	0	0	0	4
<10 & OR <2	0	0	4	4	4
<20 & OR <5	0	0	8	33	21
VSBY ≥5	0	13	21	38	13
≥50 & ≥5	0	8	13	0	0
NC & ≥10	0	8	8	0	0

24

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

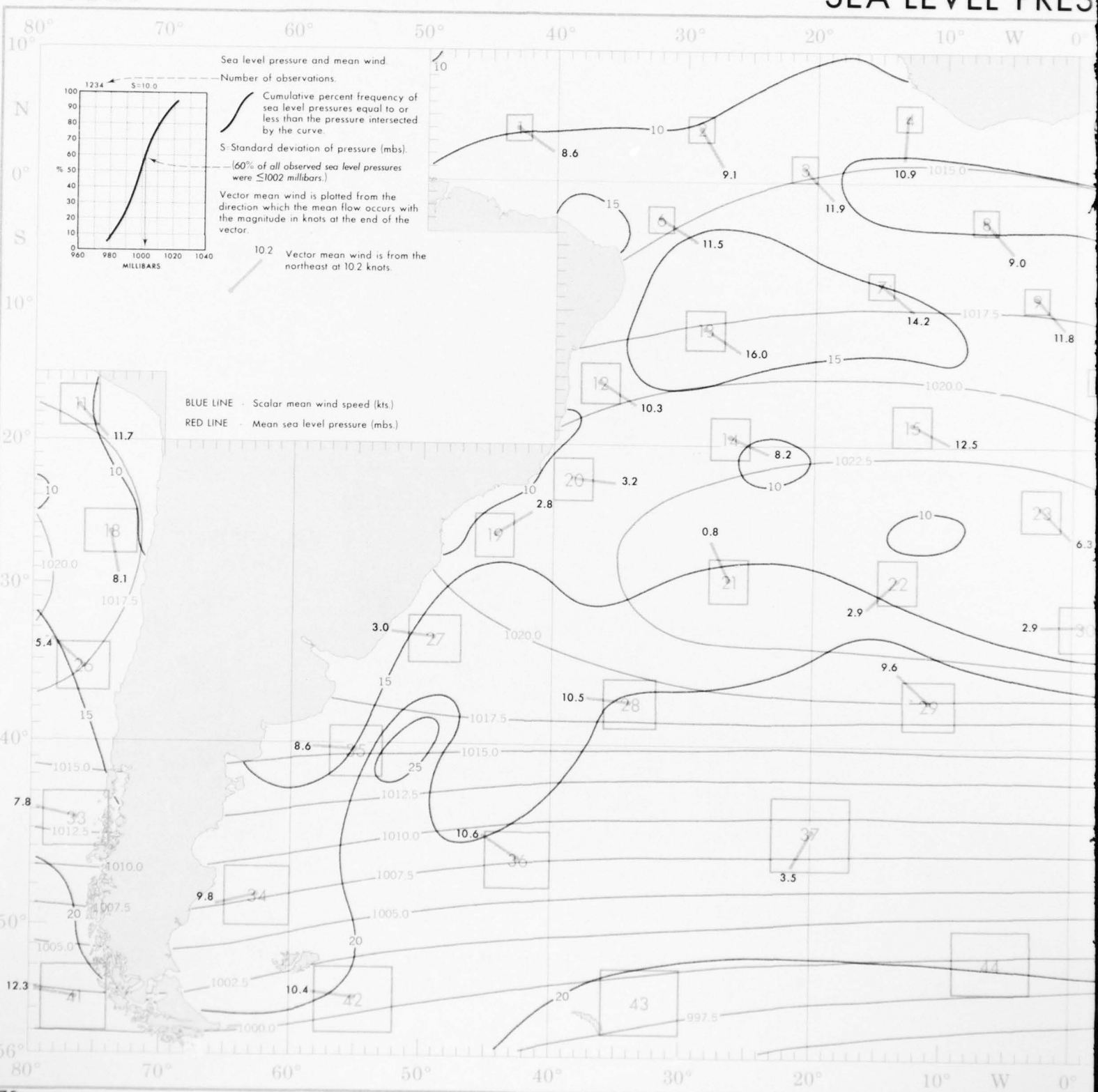
45

INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY

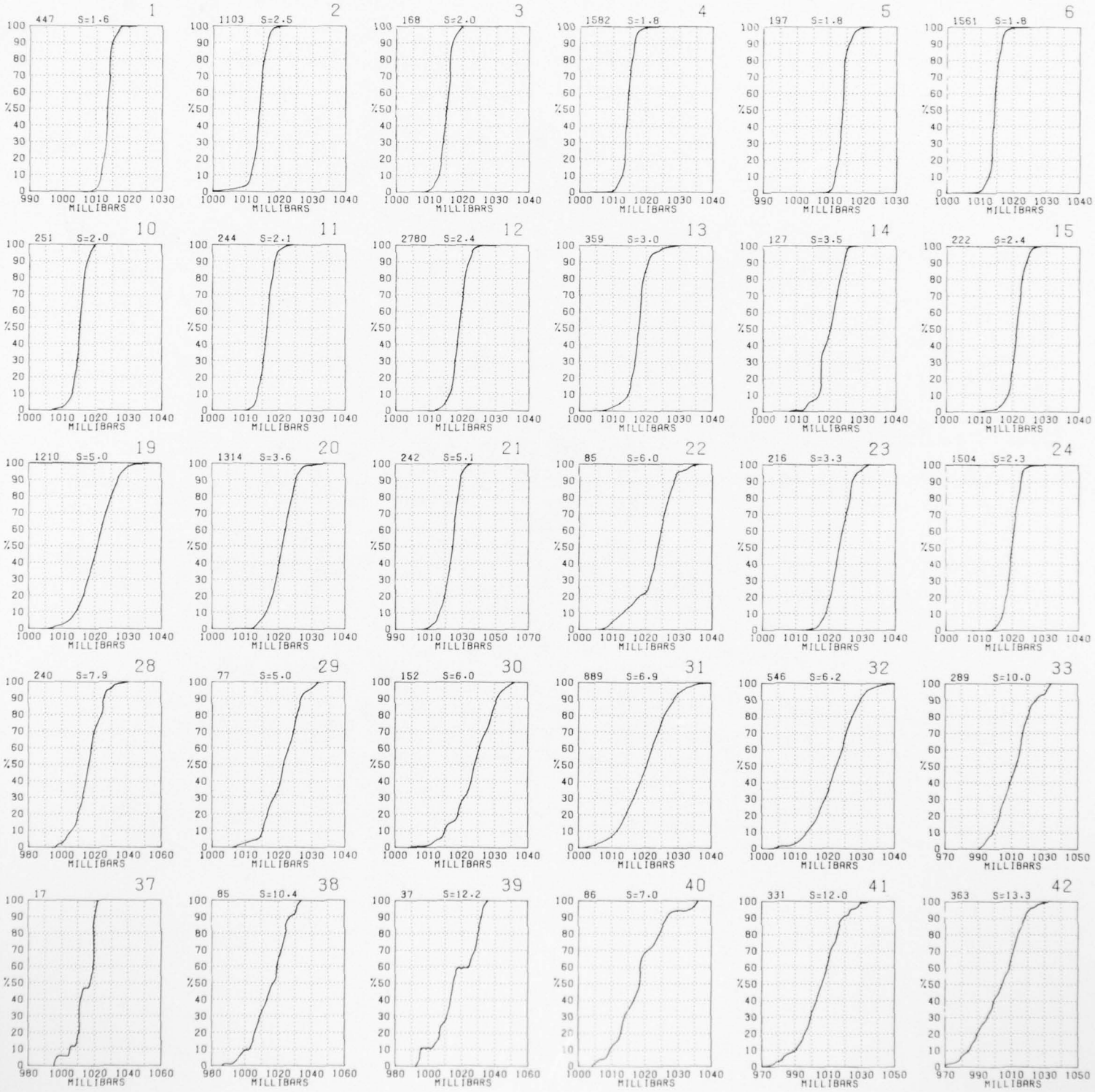
SEA LEVEL PRES



SEA LEVEL PRESSURE AND MEAN WIND



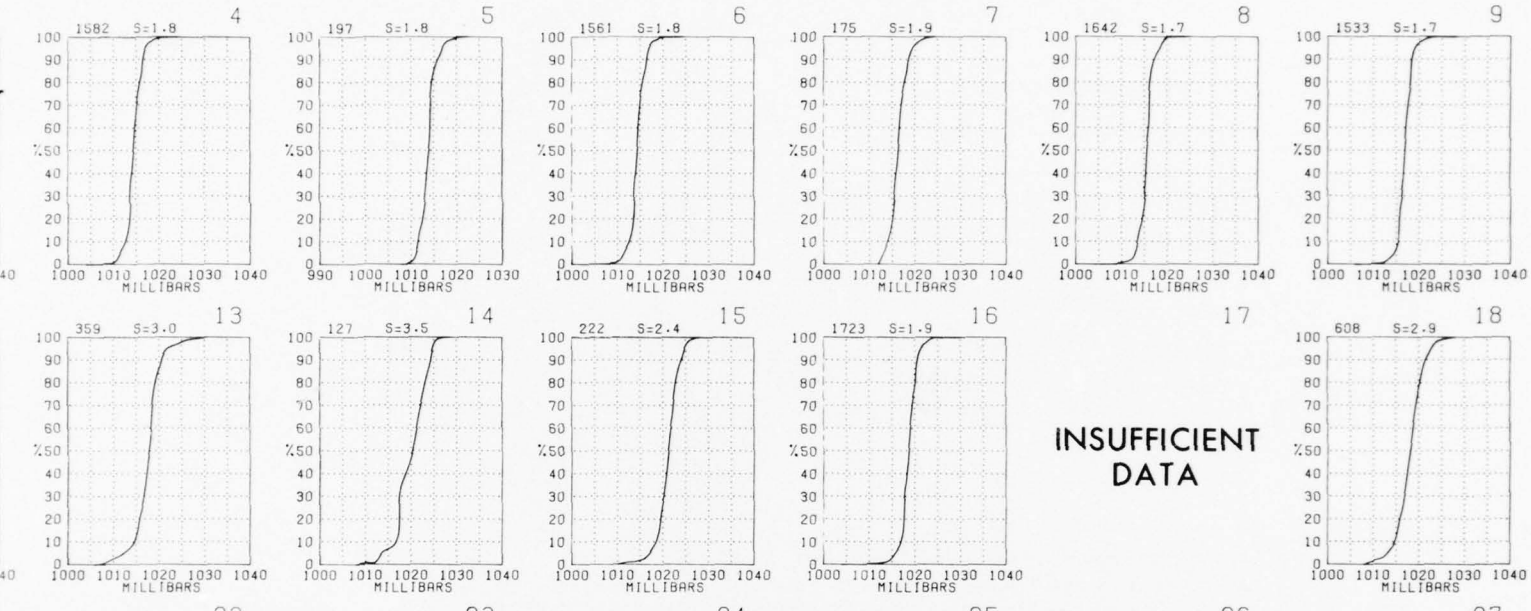
SEA LEVEL PRESSURE



INS

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

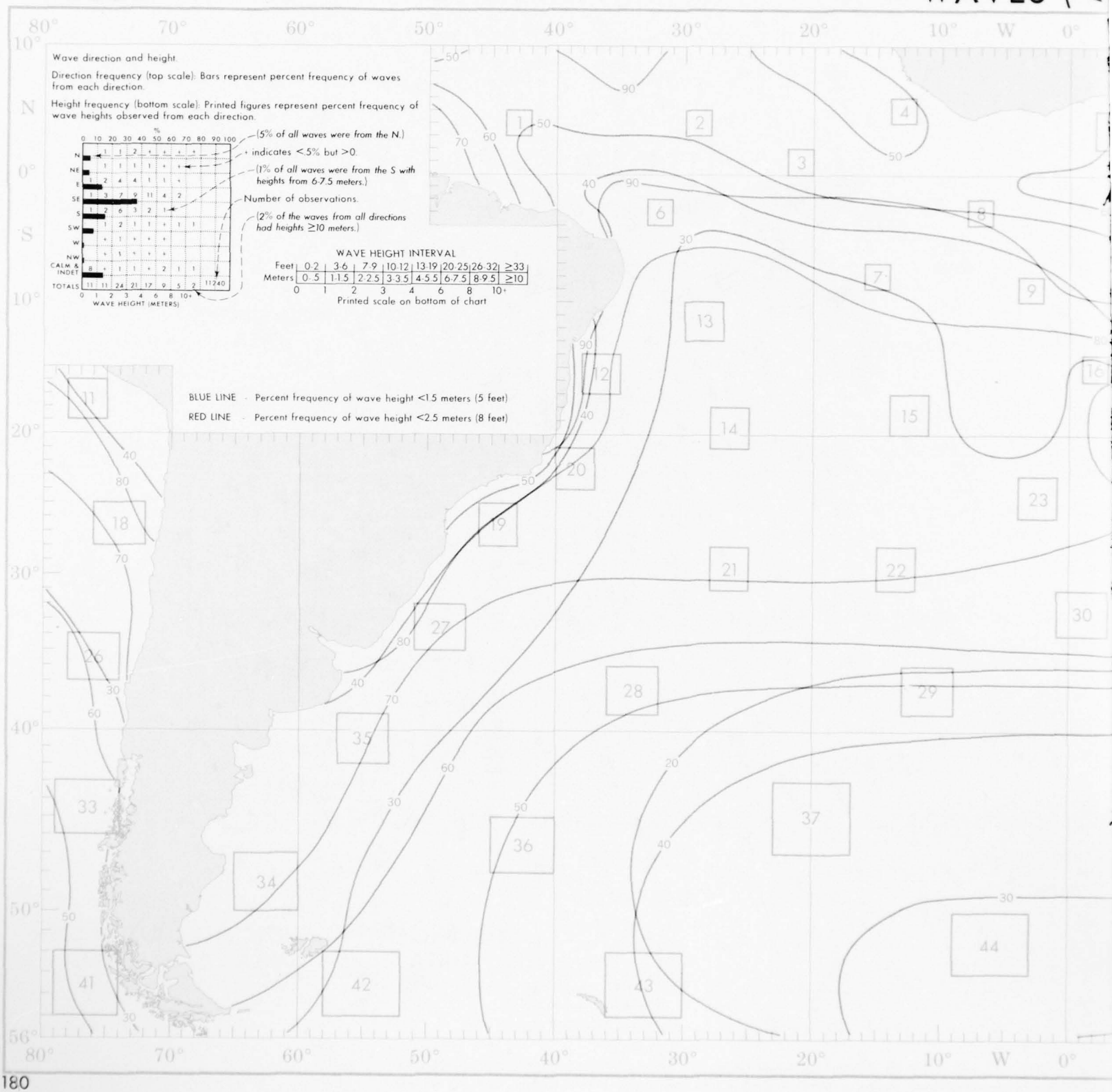
JULY



t the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY

WAVES (<

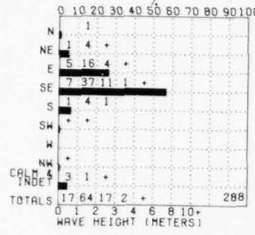

Wave direction and height.
Direction frequency (top scale): Bars represent percent frequency of waves from each direction.
Height frequency (bottom scale): Printed figures represent percent frequency of wave heights observed from each direction.
(5% of all waves were from the N.)
+ indicates <.5% but >0.
(1% of all waves were from the S with heights from 6-7.5 meters.)
Number of observations.
(2% of the waves from all directions had heights ≥10 meters.)
WAVE HEIGHT (METERS)
WAVE HEIGHT INTERVAL
Feet 0-2 3-6 7-9 10-12 13-19 20-25 26-32 ≥33
Meters 0-.5 1-1.5 2-2.5 3-3.5 4-5.5 6-7.5 8-9.5 ≥10
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

WAVES (<1.5 AND <2.5 METERS)

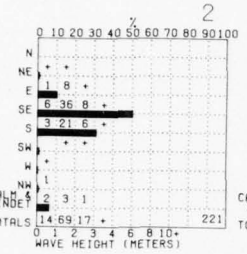


WAVE DIRECTION AND HEIGHT

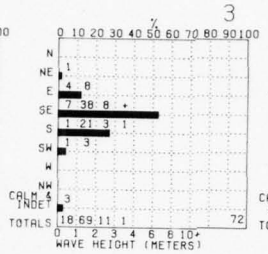
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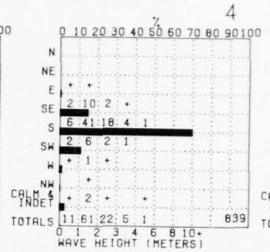
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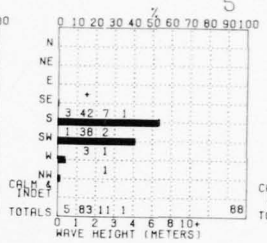
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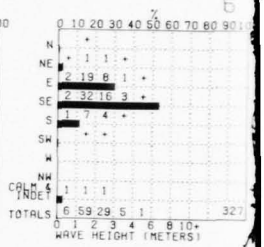
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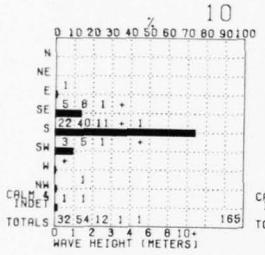
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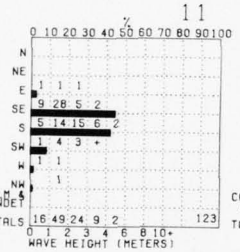
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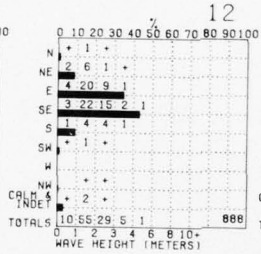
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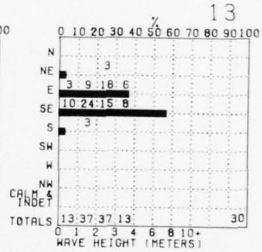
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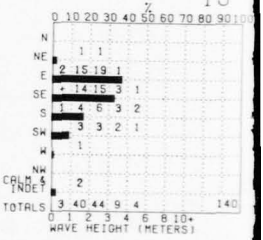
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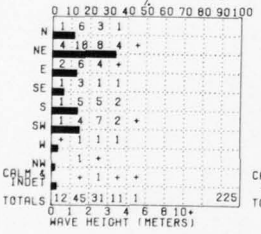
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INSUFFICIENT DATA

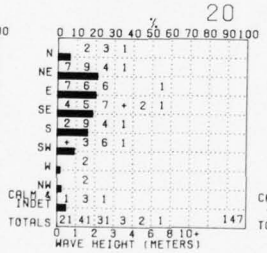
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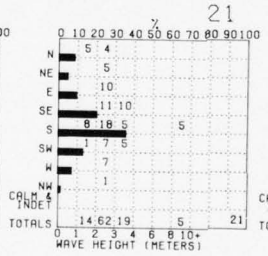
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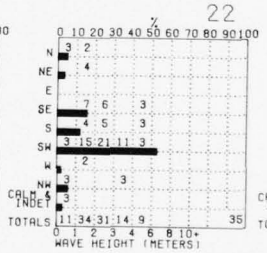
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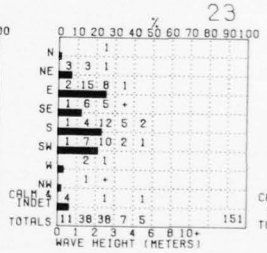
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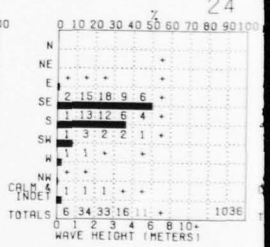
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23



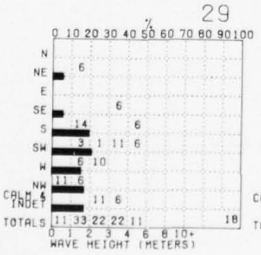
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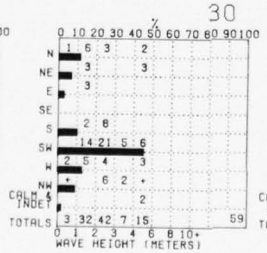
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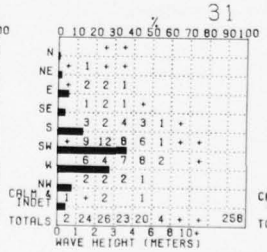
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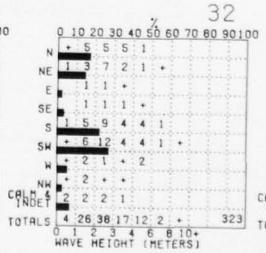
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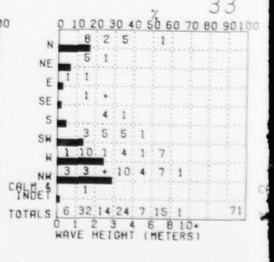
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32



33



37

INSUFFICIENT DATA

38

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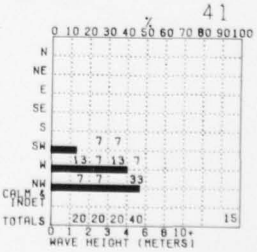
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INSUFFICIENT DATA

40

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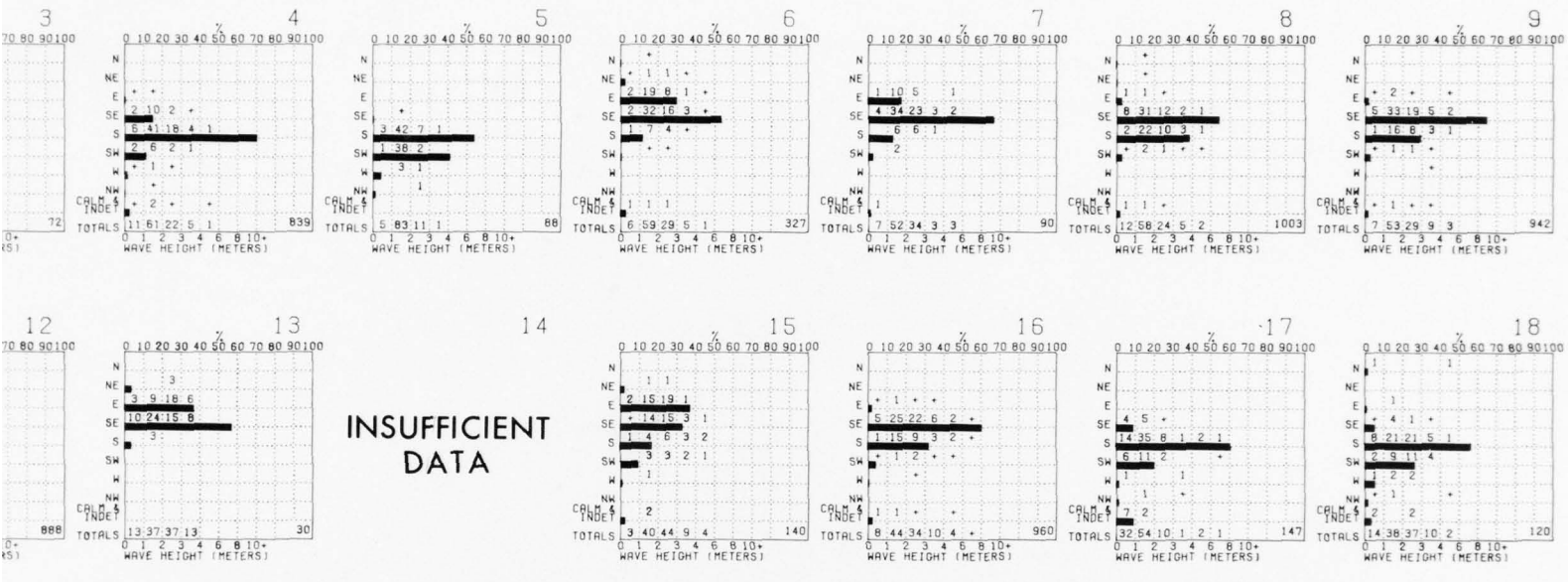
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42

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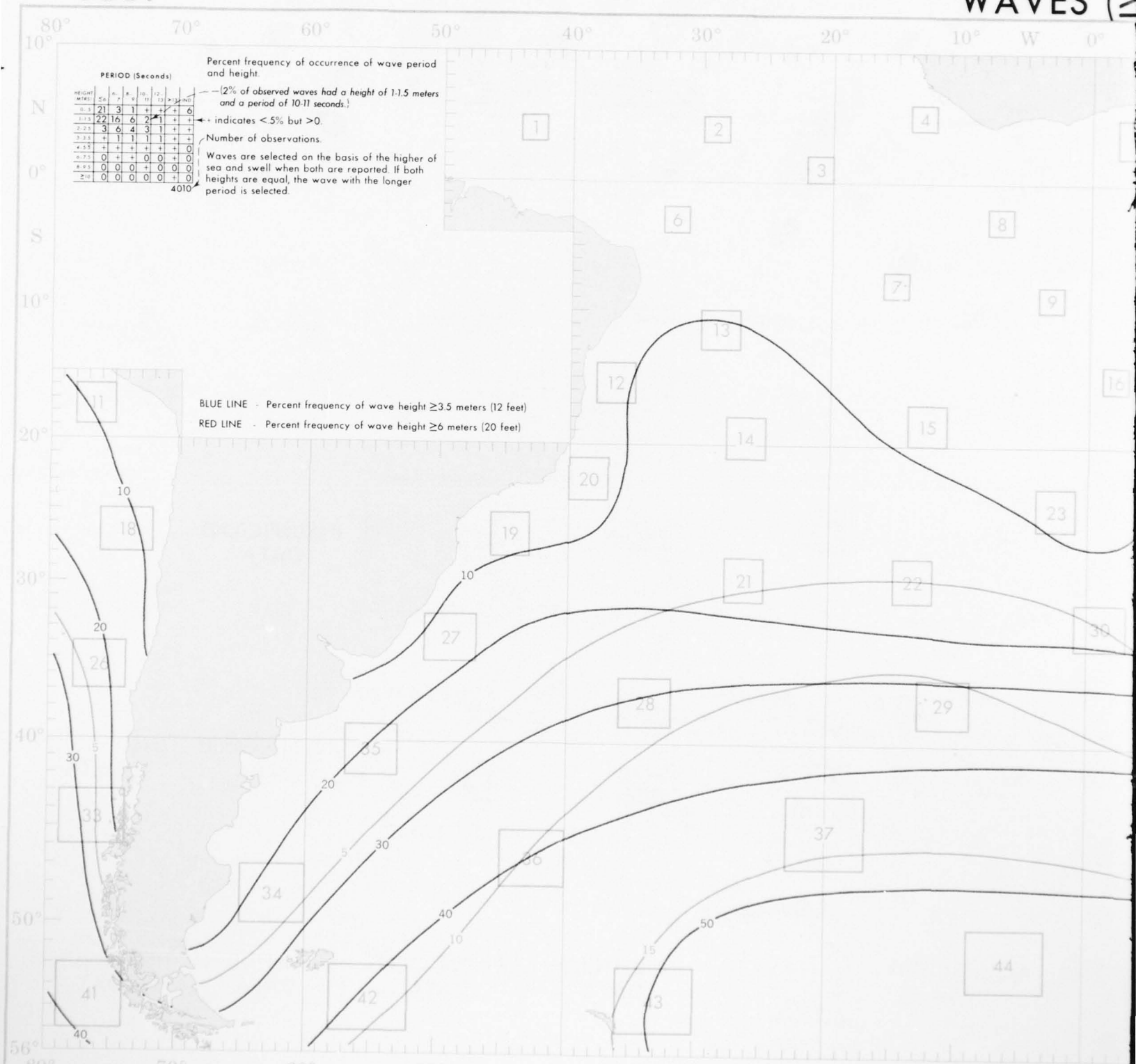
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where



esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

JULY

WAVES (≥


PERIOD (Seconds)
HEIGHT METERS
≤6
6-7
8-9
10-11
12-13
>13
ANG
0-1
21
3
1
+
+
+
6
1-1.5
22
16
6
2
1
+
+
1.5-2
3
6
4
3
1
+
+
2-2.5
+
1
1
1
+
+
+
2.5-3
+
+
+
+
+
+
0
3-3.5
0
+
+
0
0
+
0
3.5-4
0
0
0
+
0
0
0
≥4
0
0
0
0
0
+
0
4010
Percent frequency of occurrence of wave period and height.
(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)
+ indicates < 5% but >0.
Number of observations.
Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.
BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)
RED LINE - Percent frequency of wave height ≥6 meters (20 feet)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
N
S
10
20
30
40
50
1
2
3
4
6
7
8
9
11
12
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36
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41
42
43
44

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	1	+	0	0	4
1-1.5	27	25	6	2	1	+	2
2-2.5	3	6	5	2	0	0	1
3-3.5	0	+	+	1	+	0	0
4-5.5	0	0	0	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

295

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	0	0	0	0	4
1-1.5	22	25	9	3	0	+	8
2-2.5	2	5	6	1	0	+	1
3-3.5	0	0	+	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

227

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	3	0	0	0	4
1-1.5	30	21	5	10	0	3	0
2-2.5	3	3	3	3	0	0	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

73

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	1	0	0	0	0	3
1-1.5	23	16	7	4	2	1	8
2-2.5	4	7	6	2	1	1	2
3-3.5	+	2	1	1	+	+	+
4-5.5	+	+	+	+	+	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

847

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	1	0	0	0	0	2
1-1.5	26	35	10	3	0	0	8
2-2.5	3	3	1	2	0	0	1
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

88

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	1	0	0	0	2
1-1.5	19	22	5	2	1	0	9
2-2.5	7	11	7	1	0	0	3
3-3.5	1	1	2	+	+	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

330

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	1	0	4	0	0	6
1-1.5	23	11	6	2	2	1	4
2-2.5	0	8	1	1	0	0	1
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	1	0	0	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

179

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	1	0	0	6
1-1.5	25	13	5	0	0	0	3
2-2.5	2	5	7	7	2	0	0
3-3.5	0	1	4	3	0	0	1
4-5.5	0	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

130

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	1	+	+	0	0	2
1-1.5	21	21	4	1	1	+	6
2-2.5	5	12	7	2	+	+	2
3-3.5	+	2	1	1	+	0	0
4-5.5	0	+	+	+	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

903

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	3	0	3	0	0	0
1-1.5	3	17	13	3	0	0	0
2-2.5	3	27	7	0	0	0	0
3-3.5	0	7	3	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

30

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	15	13	1	4	2	0	4
2-2.5	5	18	12	5	1	2	1
3-3.5	1	4	1	2	1	0	0
4-5.5	0	1	0	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

142

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	+	1	0	0	0	1
1-1.5	18	17	5	1	+	0	3
2-2.5	5	10	9	4	+	0	3
3-3.5	+	2	6	+	2	0	+
4-5.5	0	0	0	0	+	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

227

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	3	1	0	0	0	3
1-1.5	19	11	5	2	0	0	3
2-2.5	4	9	11	3	1	0	3
3-3.5	0	1	1	1	0	0	0
4-5.5	1	0	0	1	0	0	1
6-7.5	0	1	0	0	0	1	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

148

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	5	5	0	0	0	0
2-2.5	5	5	38	10	0	5	0
3-3.5	0	0	19	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	5	0
≥10	0	0	0	0	0	0	0

21

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	3	0	0	0	0	3
1-1.5	14	14	6	0	0	0	0
2-2.5	11	6	3	6	3	0	3
3-3.5	0	0	6	0	9	0	0
4-5.5	3	0	3	0	3	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

35

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	0	0	0	0	4
1-1.5	16	15	3	2	1	1	1
2-2.5	1	14	11	7	2	2	1
3-3.5	0	1	0	4	2	1	0
4-5.5	1	1	0	0	1	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

151

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	0	0	0	2
1-1.5	9	11	6	2	1	+	4
2-2.5	4	10	8	4	2	1	3
3-3.5	1	4	6	2	1	1	+
4-5.5	+	2	3	2	2	1	1
6-7.5	0	0	0	+	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1043

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	0	0	0	0	0	0
1-1.5	5	5	21	0	0	0	0
2-2.5	5	0	0	5	0	0	11
3-3.5	0	5	5	0	0	5	5
4-5.5	0	5	0	5	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

19

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	2	0	0	0	0
1-1.5	10	14	7	2	0	0	0
2-2.5	3	2	25	12	0	0	0
3-3.5	0	2	3	0	2	0	0
4-5.5	0	0	5	2	7	0	2
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

59

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	0	0	0	0	2
1-1.5	9	6	5	2	+	0	2
2-2.5	+	6	7	6	3	1	3
3-3.5	2	5	5	6	2	1	1
4-5.5	+	3	6	6	2	1	2
6-7.5	0	+	1	1	+	2	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	+	0	0	0

263

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	2
1-1.5	13	3	2	1	+	0	6
2-2.5	8	9	9	3	2	1	8
3-3.5	3	5	3	3	1	1	2
4-5.5	1	+	3	3	1	1	3
6-7.5	0	+	+	1	+	0	+
8-9.5	0	+	0	0	0	0	0
≥10	0	0	0	0	0	0	0

324

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	8	11	7	3	0	1	3
2-2.5	4	4	3	3	0	0	0
3-3.5	3	1	7	7	0	1	4
4-5.5	0	1	0	6	0	0	0
6-7.5	0	0	1	13	1	0	0
8-9.5	0	0	0	0	0	0	1
≥10	0	0	0	0	0	0	0

72

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	20	0	0	0	0	0	0
2-2.5	0	13	0	0	0	7	0
3-3.5	0	7	13	0	0	0	0
4-5.5	7	0	0	20	13	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

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4

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	1	0	0	0	0	3
1-1.5	23	16	7	4	2	1	8
2-2.5	4	7	6	2	1	1	2
3-3.5	+	2	1	1	+	+	+
4-5.5	+	+	+	+	+	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

847

5

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	1	0	0	0	0	2
1-1.5	26	35	10	3	0	0	8
2-2.5	3	3	1	2	0	0	1
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

88

6

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	1	0	0	0	2
1-1.5	19	22	5	2	1	0	9
2-2.5	7	11	7	1	0	0	3
3-3.5	1	1	2	+	+	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

330

7

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	3
1-1.5	24	20	4	1	2	0	0
2-2.5	8	7	15	1	1	0	2
3-3.5	1	0	1	0	1	0	0
4-5.5	1	0	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

91

8

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	3
1-1.5	19	18	8	3	3	1	6
2-2.5	4	7	6	2	2	1	3
3-3.5	+	2	2	+	+	+	+
4-5.5	+	+	1	+	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1018

9

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	0	0	0	2
1-1.5	21	14	8	3	2	1	5
2-2.5	4	9	7	3	2	1	4
3-3.5	1	3	2	2	1	+	1
4-5.5	1	1	1	+	+	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

952

13

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	3	0	3	0	0	0
1-1.5	3	17	13	3	0	0	0
2-2.5	3	27	7	0	0	0	0
3-3.5	0	7	3	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

30

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	15	13	1	4	2	0	4
2-2.5	5	18	12	5	1	2	1
3-3.5	1	4	1	2	1	0	0
4-5.5	0	1	0	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

142

16

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	+	0	0	3
1-1.5	14	13	8	2	3	1	5
2-2.5	4	13	8	3	2	1	3
3-3.5	1	3	3	2	1	1	1
4-5.5	+	1	1	1	1	+	1
6-7.5	0	0	0	+	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

963

17

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	9	2	0	0	0	7
1-1.5	22	17	10	0	0	1	0
2-2.5	0	4	3	1	0	0	1
3-3.5	0	1	0	1	0	0	0
4-5.5	0	0	1	0	0	1	0
6-7.5	0	0	0	0	0	1	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

161

18

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	0	0	0	2
1-1.5	16	11	6	1	1	1	1
2-2.5	2	11	10	6	2	1	5
3-3.5	1	6	0	0	3	0	0
4-5.5	0	1	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

124

22

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	3	0	0	0	0	3
1-1.5	14	14	6	0	0	0	0
2-2.5	11	6	3	6	3	0	3
3-3.5	0	0	6	0	9	0	0
4-5.5	3	0	3	0	3	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

35

23

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	0	0	0	0	4
1-1.5	16	15	3	2	1	1	1
2-2.5	1	14	11	7	2	2	1
3-3.5	0	1	0	4	2	1	0
4-5.5	1	1	0	0	1	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

151

24

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	0	0	0	2
1-1.5	9	11	6	2	1	+	4
2-2.5	4	10	8	4	2	1	3
3-3.5	1	4	6	2	1	1	+
4-5.5	+	2	3	2	2	1	1
6-7.5	0	0	0	+	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1043

25

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	+	0	0	2
1-1.5	8	7	4	2	1	+	4
2-2.5	4	9	9	5	2	1	3
3-3.5	1	4	5	4	2	1	3
4-5.5	+	2	3	2	2	1	1
6-7.5	0	+	+	+	+	+	+
8-9.5	0	0	+	0	0	+	0
≥10	0	0	0	0	0	+	+

1739

26

INSUFFICIENT DATA

27

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	2	0	0	0	0	3
1-1.5	17	11	4	1	0	0	1
2-2.5	4	13	6	1	3	0	4
3-3.5	3	1	4	4	1	0	2
4-5.5	0	1	3	4	1	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

112

31

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	0	0	0	0	2
1-1.5	9	6	5	2	+	0	2
2-2.5	+	6	7	6	3	1	3
3-3.5	2	5	5	6	2	1	1
4-5.5	+	3	6	6	2	1	2
6-7.5	0	+	1	1	+	2	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	+	0	0	0

263

32

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	2
1-1.5	13	3	2	1	+	0	6
2-2.5	8	9	9	3	2	1	8
3-3.5	3	5	3	3	1	1	2
4-5.5	1	+	3	3	1	1	3
6-7.5	0	+	+	1	+	0	+
8-9.5	0	+	0	0	0	0	0
≥10	0	0	0	0	0	0	0

324

33

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	8	11	7	3	0	1	3
2-2.5	4	4	3	3	0	0	0
3-3.5	3	1	7	7	0	1	4
4-5.5	0	1	0	6	0	0	0
6-7.5	0	0	1	13	1	0	0
8-9.5	0	0	0	0	0	0	1
≥10	0	0	0	0	0	0	0

72

34

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	0	0	0	0	0	0
1-1.5	21	21	4	4	0	0	0
2-2.5	8	21	0	4	0	0	0
3-3.5	0	4	0	0	0	0	0
4-5.5	0	0	4	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

24

35

INSUFFICIENT DATA

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	20	0	0	0	0	0	0
2-2.5	0	13	0	0	0	7	0
3-3.5	0	7	13	0	0	0	0
4-5.5	7	0	0	20	13	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

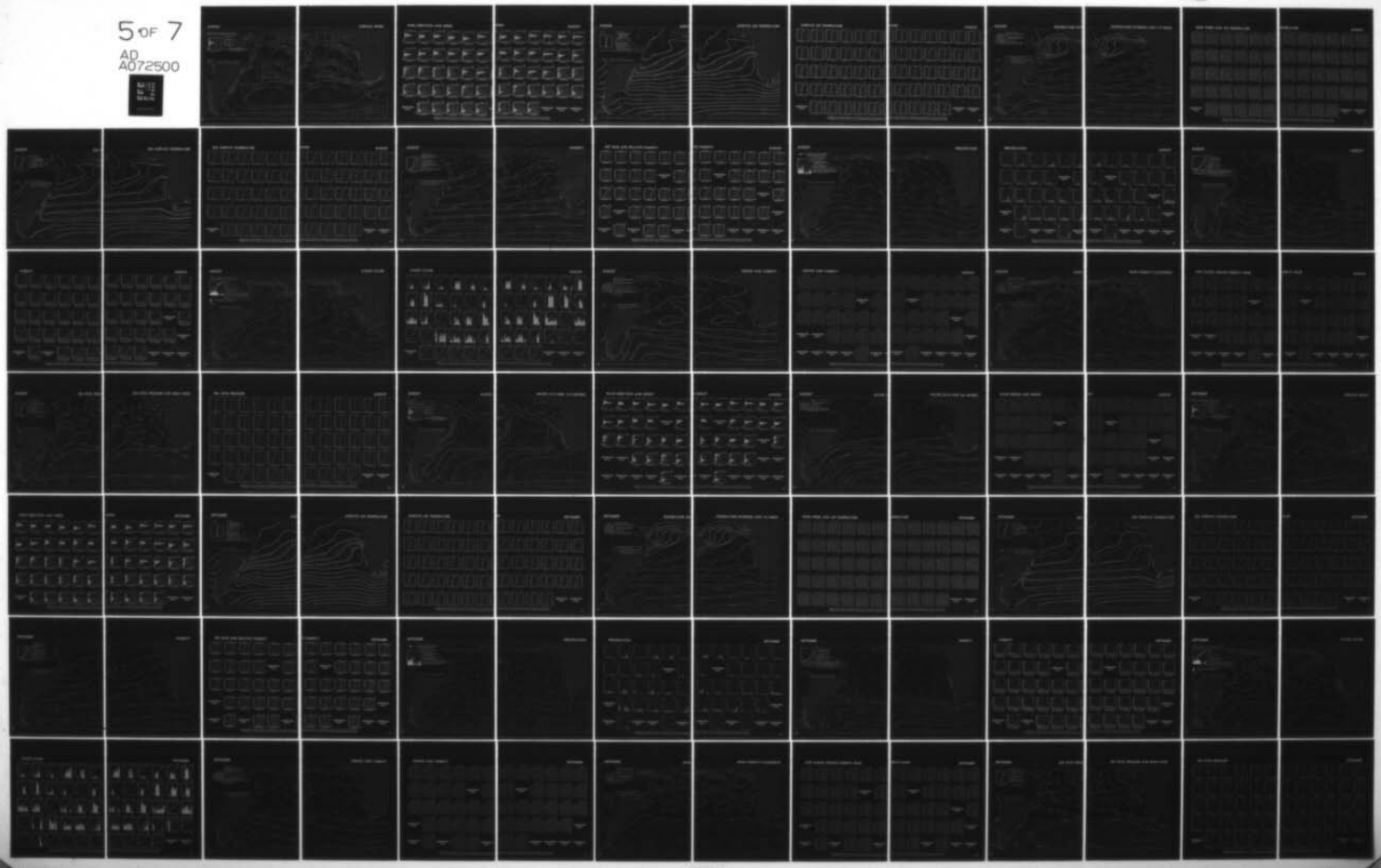
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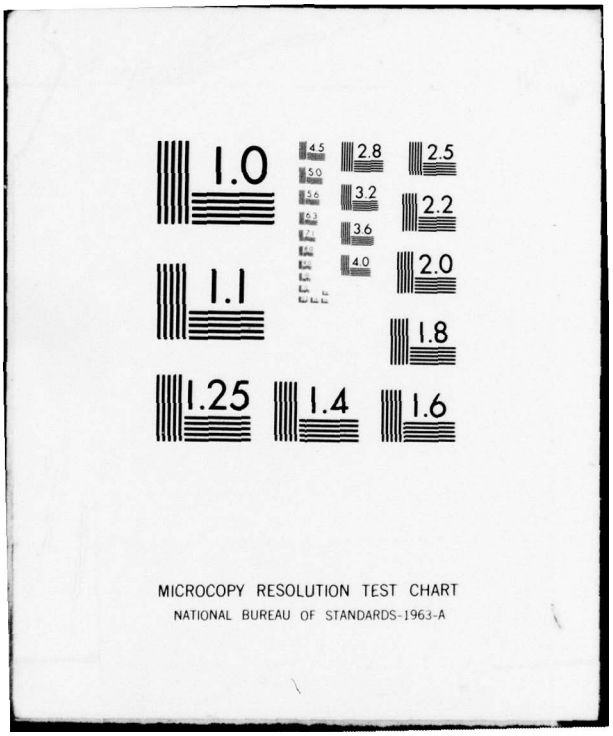
INSUFFICIENT DATA

t the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

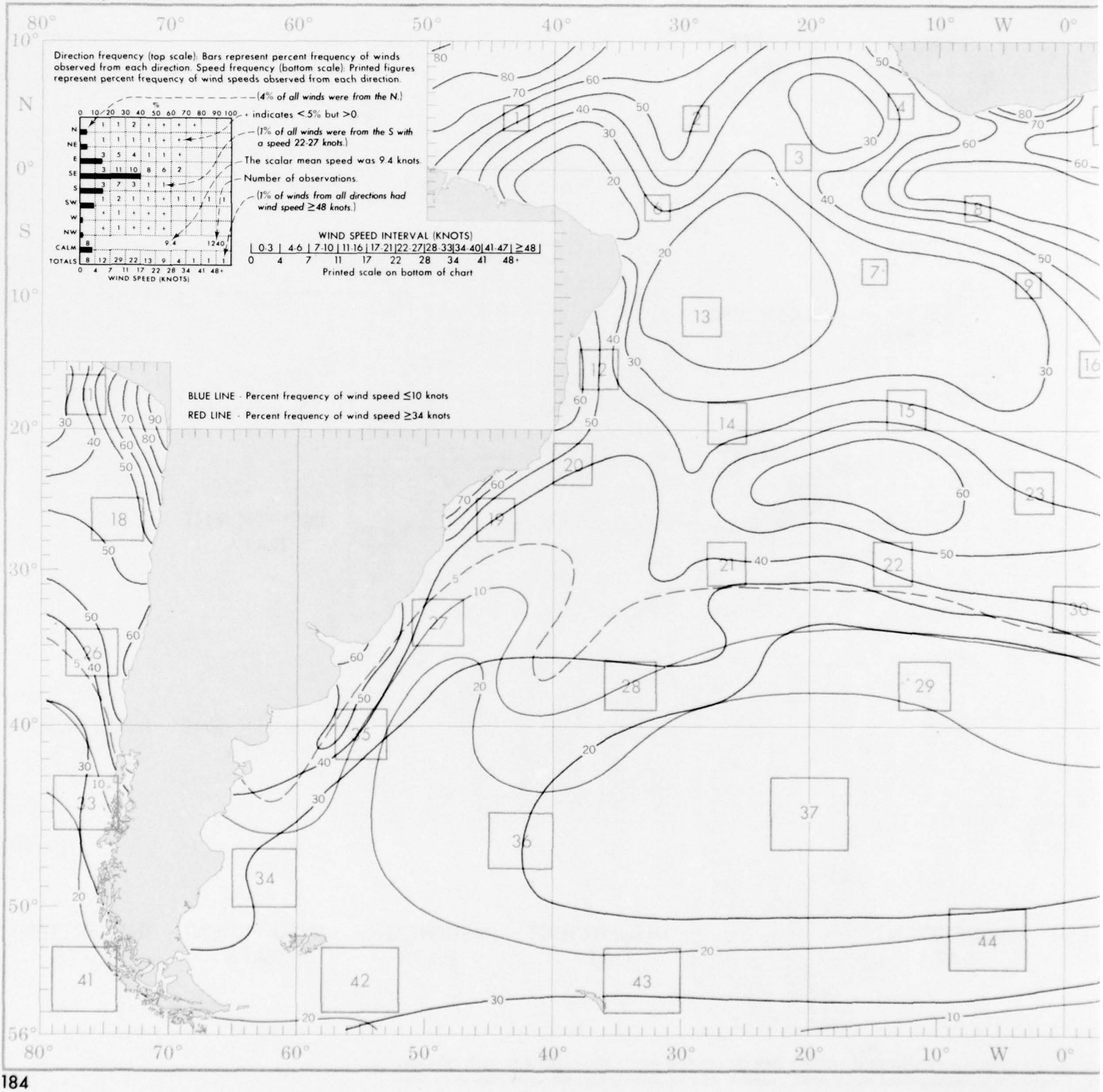
AD-A072 500 NAVAL AIR SYSTEMS COMMAND WASHINGTON DC F/G 4/2
U. S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD. VOLUME IV. SOUTH--ETC(U)
MAR 78
UNCLASSIFIED NAVAIR-50-1C-531 NL

5 OF 7
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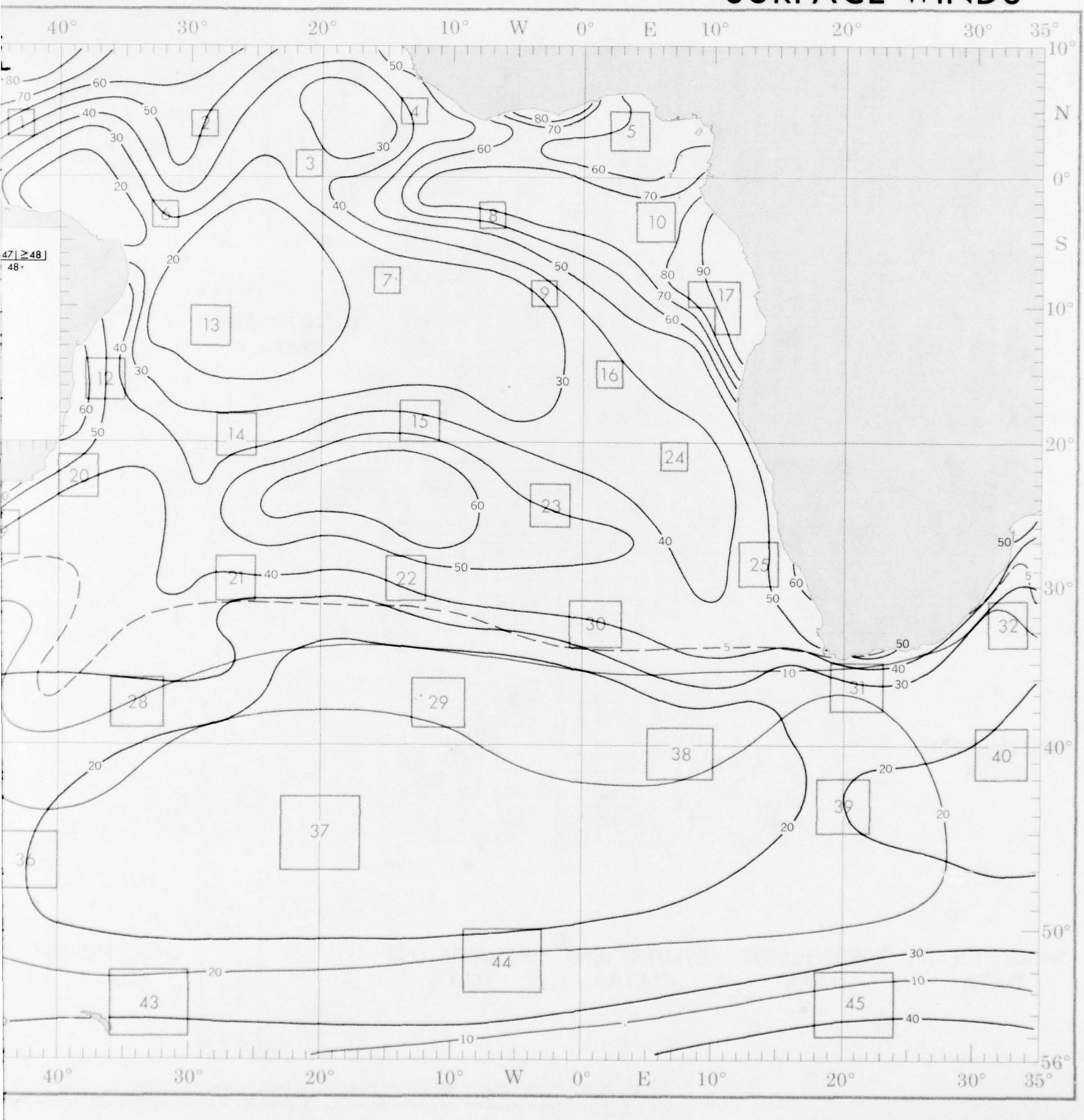



1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

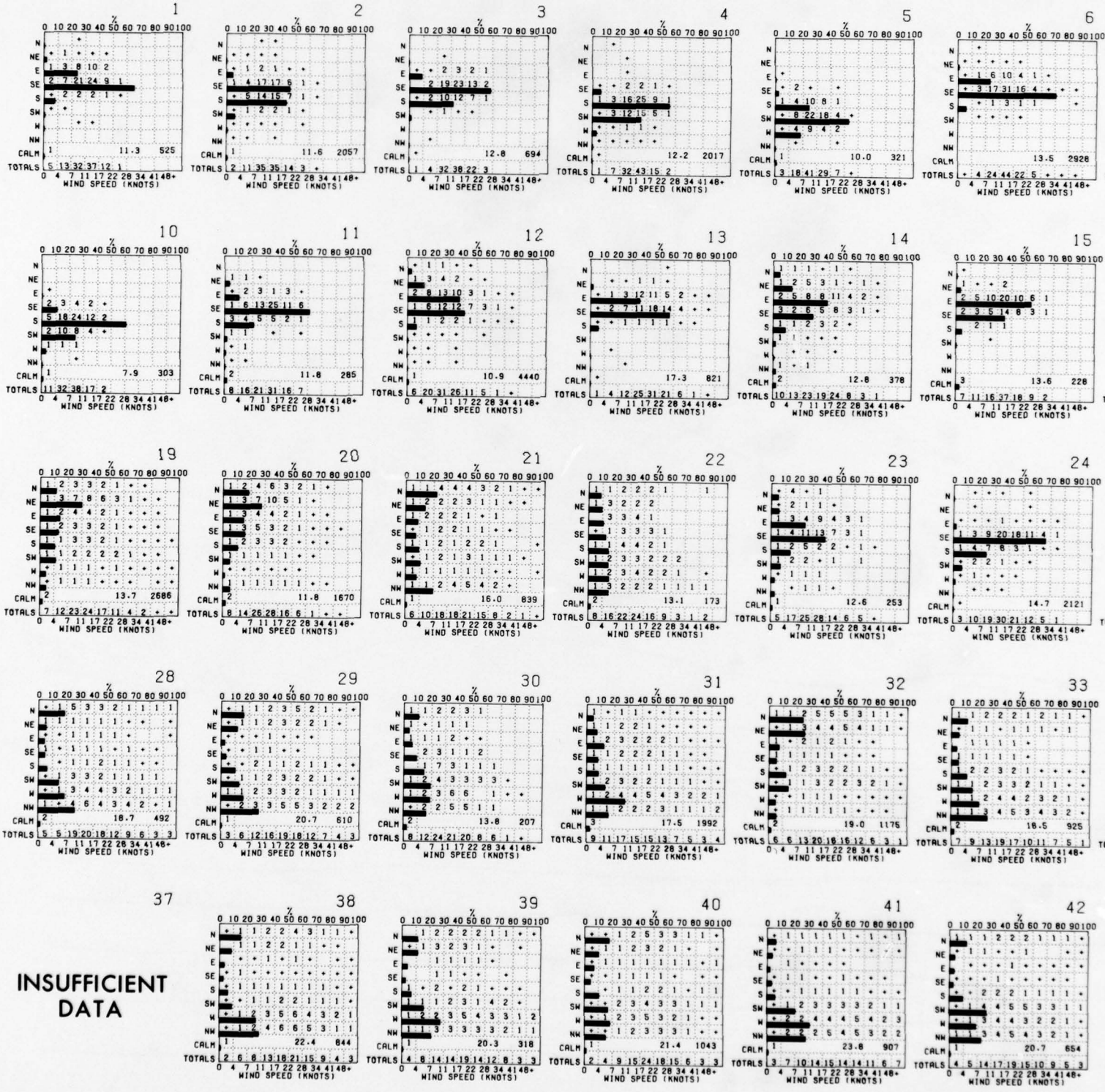
AUGUST


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates <.5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
| 0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48 |
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

SURFACE WINDS

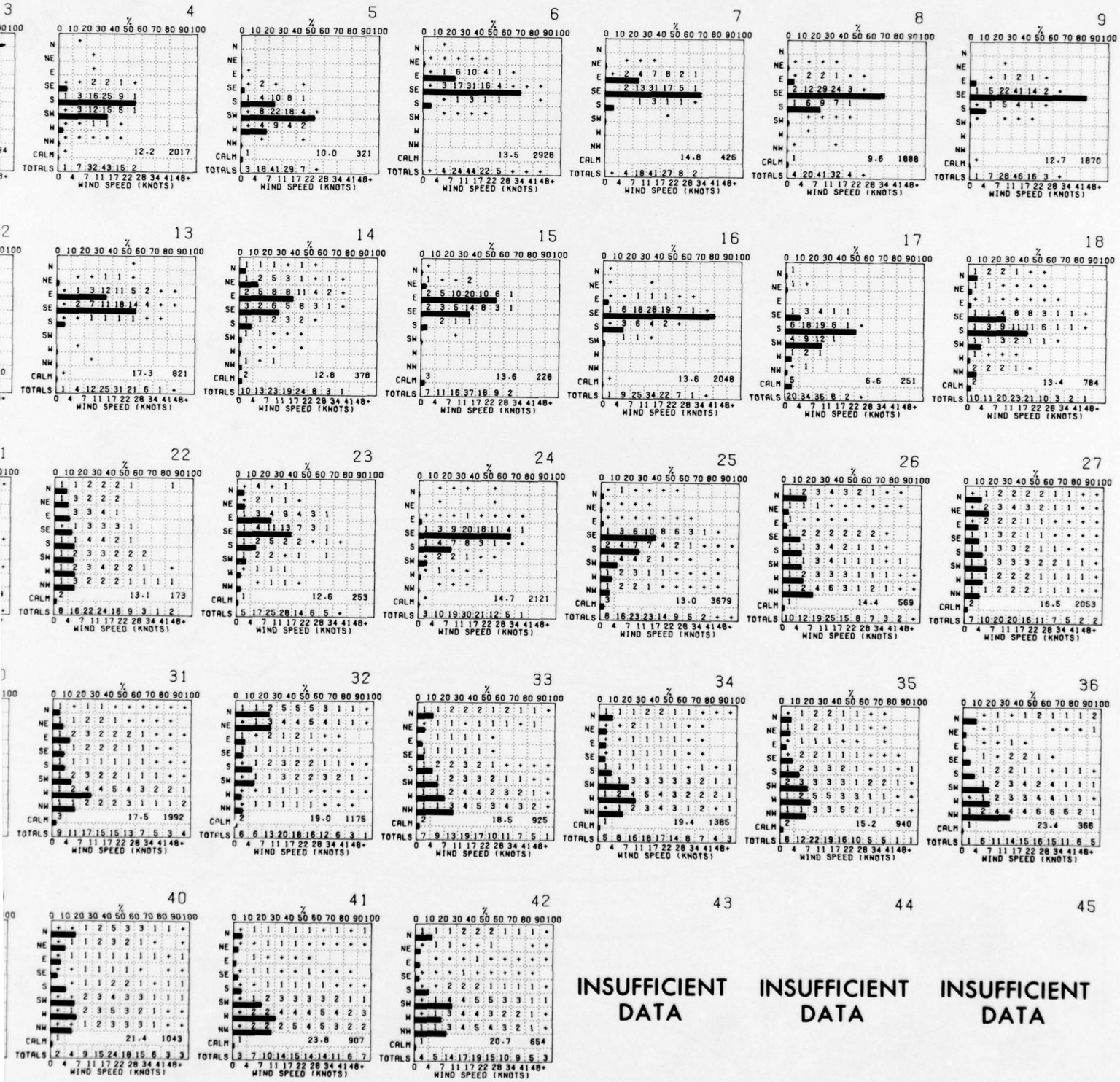


WIND DIRECTION AND SPEED



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias



43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

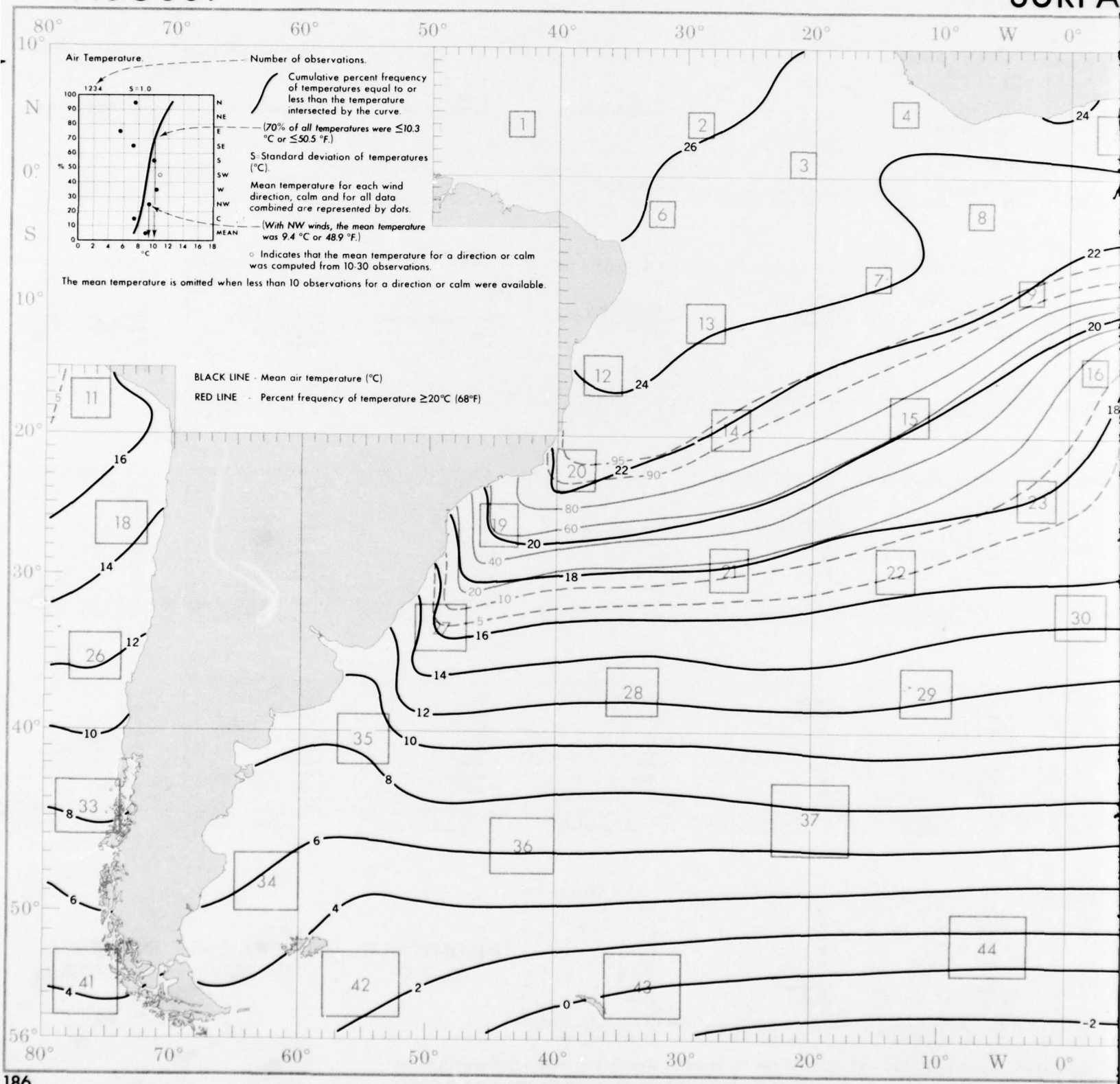
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INSUFFICIENT DATA

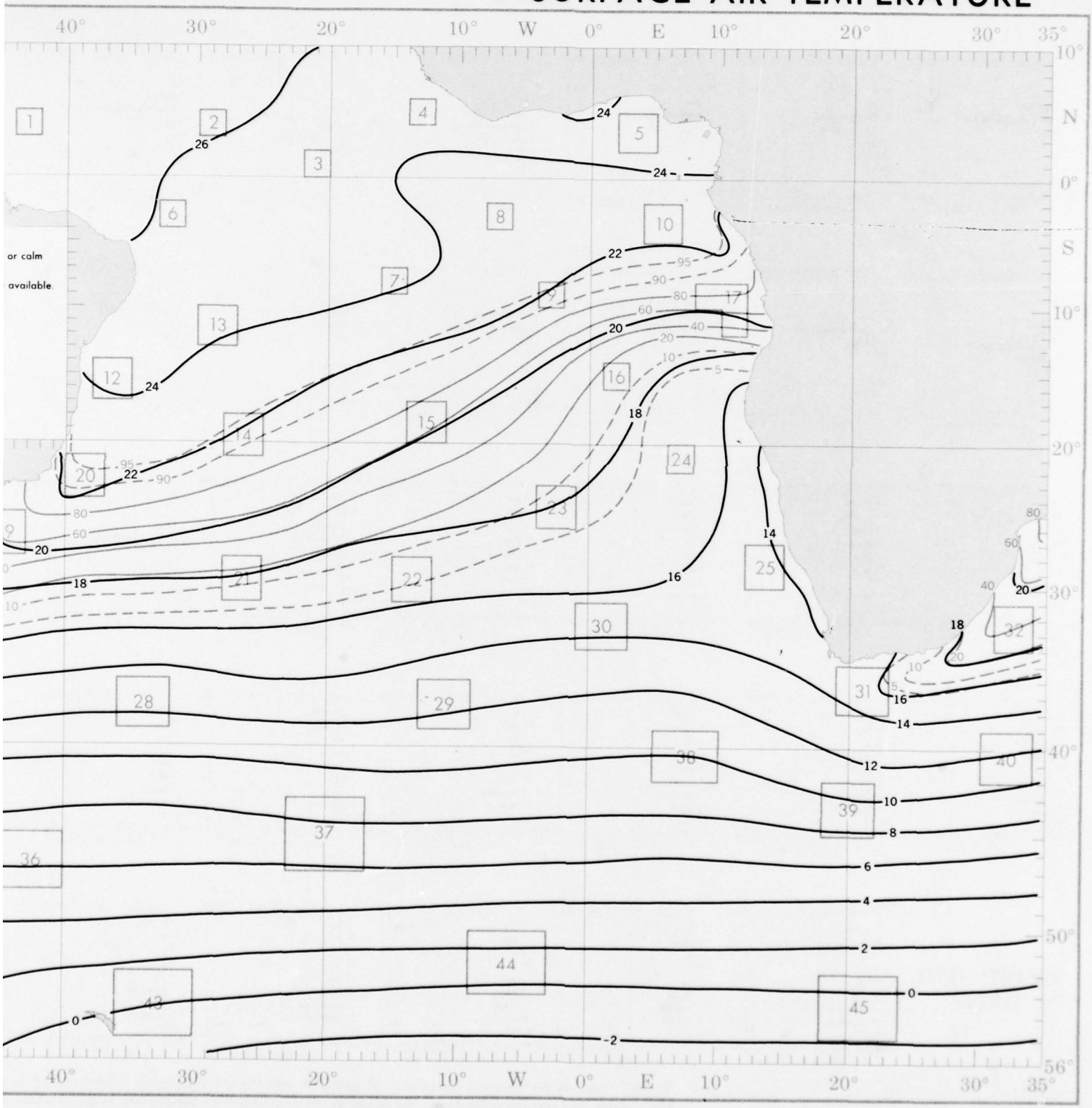
the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

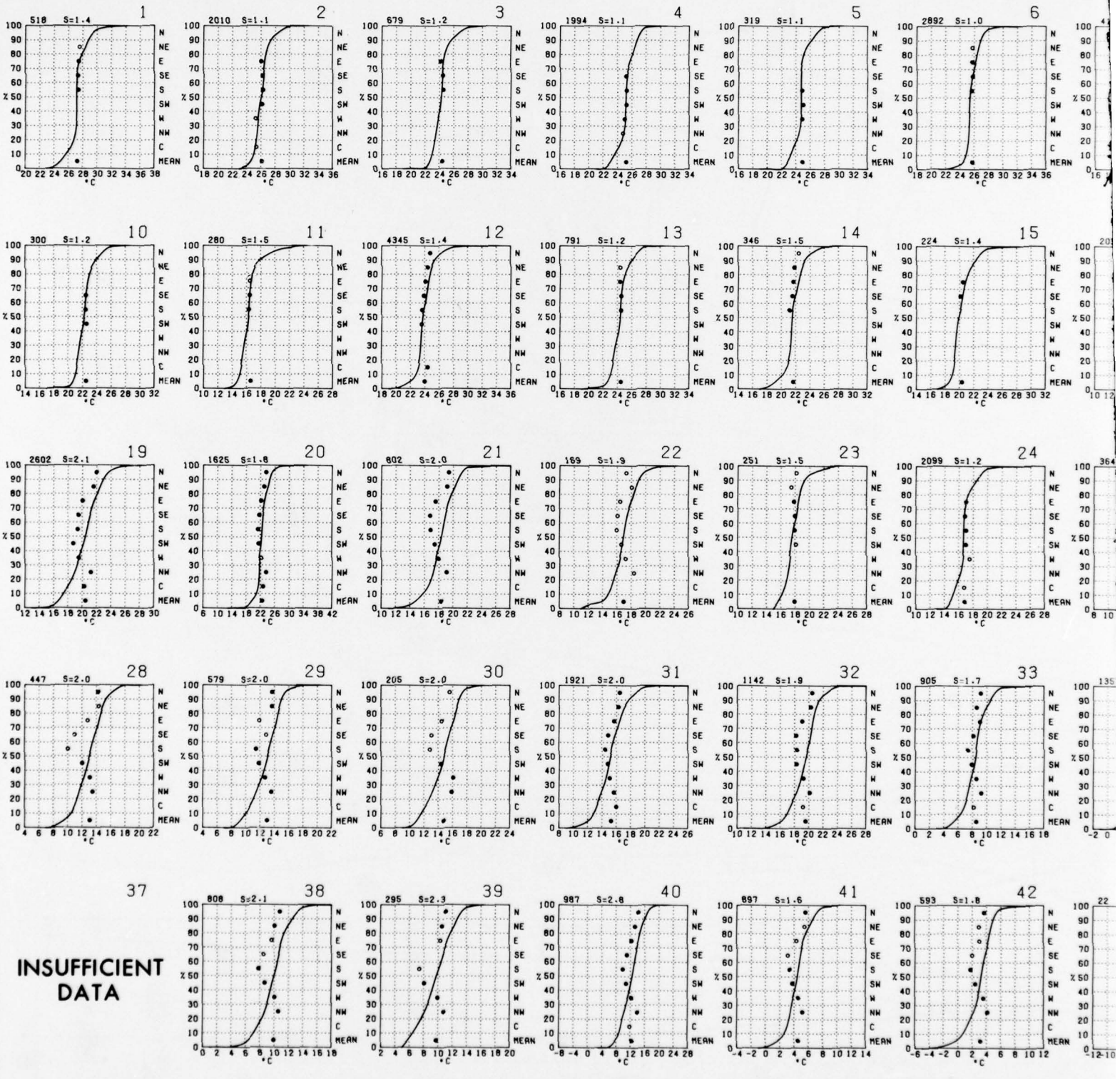
SURFA



SURFACE AIR TEMPERATURE

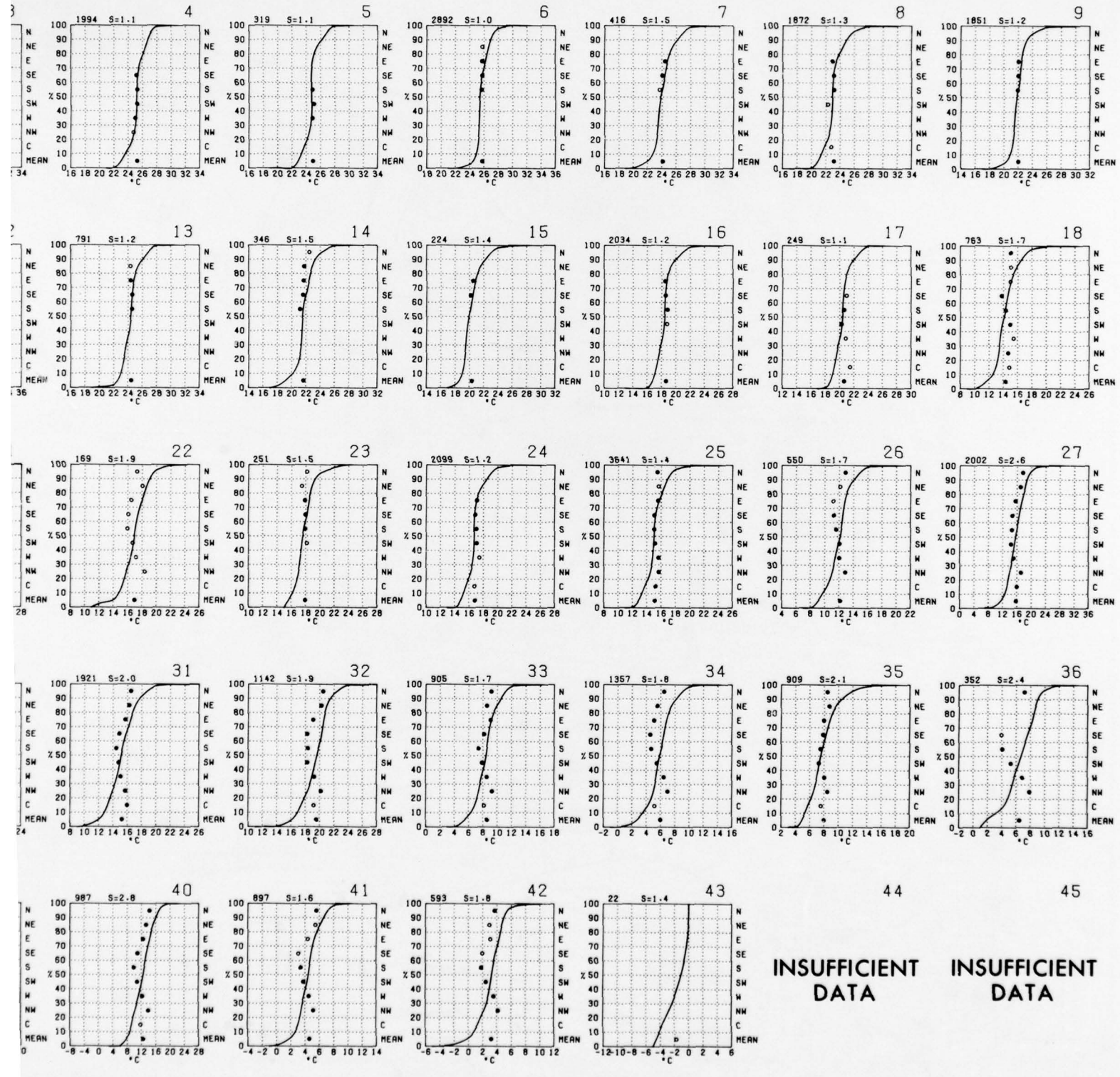


SURFACE AIR TEMPERATURE



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias



44

INSUFFICIENT DATA

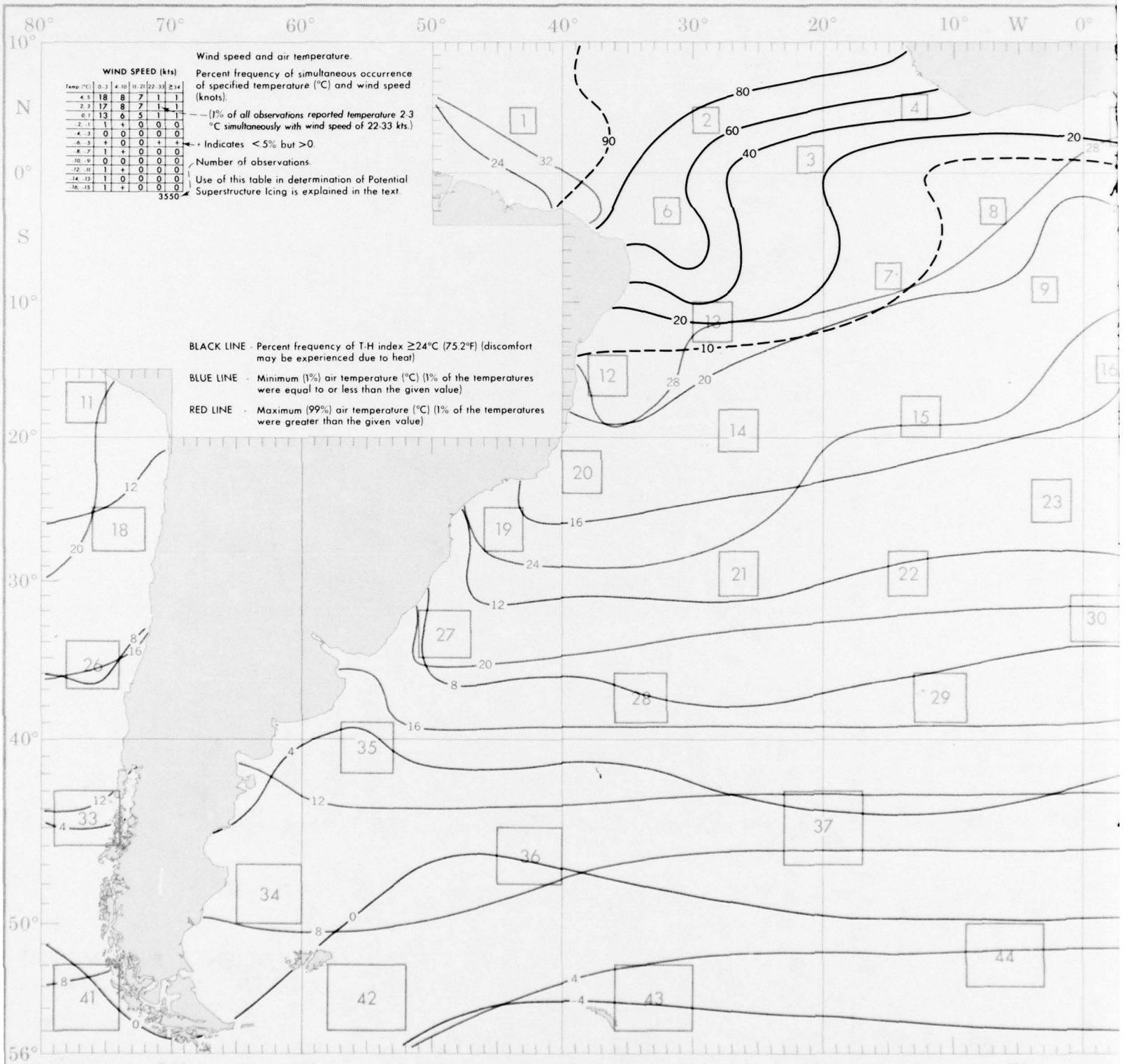
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INSUFFICIENT DATA

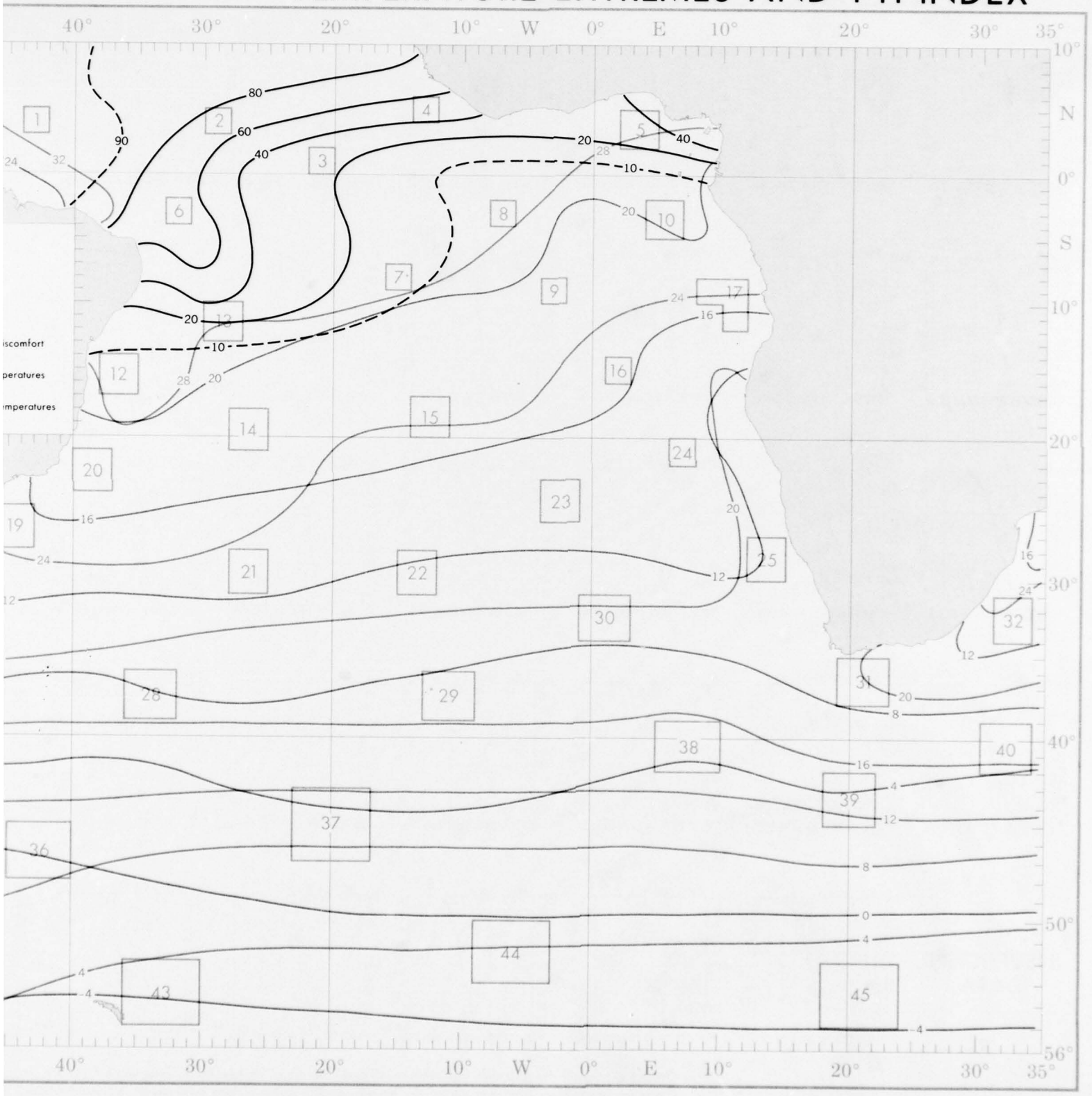
ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

TEMPERATURE EXTR



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

1

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	1	0	0
30.31	0	3	3	0	0
28.29	2	14	19	1	0
26.27	3	26	25	+	0
24.25	1	3	1	+	0
22.23	+	0	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

519

2

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	1	0	0
28.29	+	5	5	+	0
26.27	1	28	35	2	0
24.25	1	12	8	1	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2012

3

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	1	1	0	0
26.27	+	6	10	+	0
24.25	0	23	38	2	0
22.23	+	7	10	+	0
20.21	0	+	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

679

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	+	0
28.29	0	1	1	+	0
26.27	1	16	22	1	0
24.25	1	20	32	1	0
22.23	+	2	2	+	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

2001

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	1	0	0
26.27	+	15	8	0	0
24.25	3	40	26	+	0
22.23	1	4	1	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

319

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	2	3	+	0
26.27	+	15	39	4	-
24.25	+	12	23	2	0
22.23	0	+	+	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

2892

10

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	+	0	0
24.25	1	13	3	0	0
22.23	8	45	11	0	0
20.21	2	11	4	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

302

11

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	+	0	0
20.21	0	2	+	0	0
18.19	1	5	5	2	0
16.17	6	22	31	6	0
14.15	1	6	9	0	0
12.13	0	1	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

280

12

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	+	0
30.31	+	+	+	0	0
28.29	+	1	+	+	0
26.27	1	6	4	+	0
24.25	3	30	20	2	+
22.23	1	14	12	3	+
20.21	+	1	1	+	+
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

4348

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	1	+	0
26.27	0	4	9	4	+
24.25	+	10	37	18	1
22.23	+	1	8	4	+
20.21	0	0	1	+	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

791

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	1	1	0	0	0
24.25	2	4	3	1	0
22.23	4	18	21	5	0
20.21	3	12	18	5	+
18.19	0	0	1	2	1
16.17	0	0	1	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

346

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	1	0	0
24.25	0	1	0	0	0
22.23	1	5	9	2	0
20.21	5	12	32	6	0
18.19	2	7	13	3	0
16.17	0	1	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

225

19

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	+	+	+	0
24.25	+	3	2	1	0
22.23	2	11	12	4	+
20.21	3	12	15	4	+
18.19	1	7	9	4	1
16.17	+	2	3	2	+
14.15	+	+	+	+	+
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2604

20

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	+	+	0	0	0
28.29	+	1	+	0	0
26.27	+	2	1	+	0
24.25	2	9	10	2	0
22.23	4	19	22	3	+
20.21	1	9	8	1	+
18.19	+	1	1	+	0
16.17	+	+	+	+	0
14.15	0	+	+	0	0
12.13	0	+	0	0	0

1627

21

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	0	0	0	+	0
24.25	+	+	+	+	0
22.23	+	1	1	2	+
20.21	1	6	11	7	+
18.19	3	13	16	9	2
16.17	1	5	8	4	+
14.15	+	2	3	2	1
12.13	+	+	1	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

802

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	0	0	0
22.23	0	1	0	0	0
20.21	1	4	2	1	0
18.19	5	12	10	4	1
16.17	1	18	20	5	0
14.15	0	4	8	1	0
12.13	0	0	1	2	0
10.11	0	0	0	0	1
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

169

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	0	2	1	0	0
20.21	1	6	2	+	0
18.19	3	21	24	5	0
16.17	2	11	13	6	0
14.15	0	1	2	0	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

252

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	+	+	+	+	0
20.21	0	1	1	+	0
18.19	1	7	11	3	+
16.17	2	20	36	11	1
14.15	+	1	2	1	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

2106

28

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	+	0	0
16.17	1	2	4	4	2
14.15	2	7	12	8	5
12.13	2	9	14	5	3
10.11	+	5	8	2	1
8.9	1	+	1	1	+
6.7	0	0	+	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

447

29

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	0	1	+
16.17	1	1	1	3	1
14.15	1	8	13	11	6
12.13	1	4	14	8	4
10.11	1	4	6	5	2
8.9	+	1	1	2	2
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

579

30

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	1	3	1	0
16.17	1	13	19	3	1
14.15	4	11	12	3	0
12.13	3	9	5	5	0
10.11	0	1	2	2	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

207

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	+	0	0
22.23	+	+	+	0	0
20.21	+	+	1	+	+
18.19	1	5	3	2	1
16.17	3	9	11	6	3
14.15	4	10	11	9	5
12.13	1	3	4	3	2
10.11	+	1	1	+	1
8.9	0	0	0	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1924

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	+	+	+	0
22.23	+	2	5	5	1
20.21	2	8	15	14	4
18.19	1	6	12	6	2
16.17	1	2	4	3	2
14.15	+	+	1	1	1
12.13	0	0	0	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1146

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	0
14.15	0	+	+	0	0
12.13	+	1	1	+	+
10.11	2	5	10	7	5
8.9	3	10	17	10	6
6.7	2	4	7	4	2
4.5	+	1	1	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

906

37

INSUFFICIENT DATA

38

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	+	+
14.15	0	+	2	1	1
12.13	+	1	6	7	4
10.11	1	6	11	17	5
8.9	1	5	11	9	3
6.7	+	1	2	3	2
4.5	0	+	0	1	1
2.3	0	+	0	+	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

808

39

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	1	2	2	1
12.13	0	4	7	6	4
10.11	2	4	9	8	6
8.9	2	7	10	5	3
6.7	1	3	5	4	1
4.5	0	0	1	1	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

295

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	+	1	1	1	1
16.17	+	1	5	4	1
14.15	1	2	10	8	3
12.13	1	4	9	9	3
10.11	+	3	9	5	2
8.9	1	2	5	3	1
6.7	+	+	1	1	1
4.5	0	0	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

987

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	+	1	1	1	1
6.7	+	3	7	7	6
4.5	1	9	14	14	11
2.3	1	4	7	5	4
0.1	+	+	1	1	+
-2.-1	0	0	0	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

897

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	0	+	0
8.9	0	0	+	+	0
6.7	+	1	2	2	+
4.5	1	9	18	8	6
2.3	2	7	11	10	7
0.1	+	2	3	2	3
-2.-1	+	+	1	1	+
-4.-3	0	+	+	+	0
-6.-5	0	0	0	0	+
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

593

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

EMPERATURE

AUGUST

3

≥ 34
0
0
0
0
0
0
0
0
0
0
679

4 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	+	0
28.29	0	1	1	+	0
26.27	1	16	22	1	0
24.25	1	20	32	1	0
22.23	+	2	2	+	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
					2001

5 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	1	1	0	0
26.27	+	15	8	0	0
24.25	3	40	26	+	0
22.23	1	4	1	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
					319

6 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	2	3	+	0
26.27	+	15	39	4	+
24.25	+	12	23	2	0
22.23	0	+	+	0	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
					2892

7 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	1	1	+	0
26.27	0	4	10	+	0
24.25	+	11	32	6	0
22.23	0	5	24	2	0
20.21	0	0	2	+	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
					416

8 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-2	22-33	≥ 34
30.31	+	+	+	0	0
28.29	+	+	+	0	0
26.27	+	4	2	0	0
24.25	1	15	9	0	0
22.23	2	39	22	+	0
20.21	+	2	1	0	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
					1881

9 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	0	1	1	0	0
24.25	0	3	5	+	0
22.23	1	21	38	2	0
20.21	+	9	17	1	0
18.19	0	+	+	0	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
					1853

2

≥ 34
0
0
0
0
+
+
+
0
0
0
348

13 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	1	+	0
26.27	0	4	9	4	+
24.25	+	10	37	18	1
22.23	+	1	8	4	+
20.21	0	0	1	+	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
					791

14 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	1	1	0	0	0
24.25	2	4	3	1	0
22.23	4	18	21	5	0
20.21	3	12	18	5	+
18.19	0	0	1	2	1
16.17	0	0	1	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
					346

15 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	1	0	0
24.25	0	1	0	0	0
22.23	1	5	9	2	0
20.21	5	12	32	6	0
18.19	2	7	13	3	0
16.17	0	1	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
					225

16 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	+	0	0
22.23	+	1	1	+	0
20.21	1	7	9	2	0
18.19	1	23	41	6	+
16.17	+	3	5	1	0
14.15	0	+	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					2034

17 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	1	1	+	0	0
22.23	6	10	1	0	0
20.21	12	49	7	+	0
18.19	1	9	2	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					250

18 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	+	0	0
20.21	+	+	+	0	0
18.19	1	2	2	+	0
16.17	2	8	5	2	+
14.15	6	14	23	6	+
12.13	2	7	11	4	2
10.11	0	+	1	+	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
					764

1

≥ 34
0
0
+
+
2
+
1
0
0
0
802

22 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	0	0	0
22.23	0	1	0	0	0
20.21	1	4	2	1	0
18.19	5	12	10	4	1
16.17	1	18	20	5	0
14.15	0	4	8	1	0
12.13	0	0	1	2	0
10.11	0	0	0	0	1
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					169

23 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	0	2	1	0	0
20.21	1	6	2	+	0
18.19	3	21	24	5	0
16.17	2	11	13	6	0
14.15	0	1	2	0	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					252

24 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	+	+	+	+	0
20.21	0	1	1	+	0
18.19	1	7	11	3	+
16.17	2	20	36	11	1
14.15	+	1	2	1	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					2106

25 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	+	0
20.21	+	+	+	+	+
18.19	1	2	2	+	+
16.17	3	15	11	3	+
14.15	4	20	21	8	1
12.13	+	2	2	1	+
10.11	0	+	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
					3681

26 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	0	0	0
16.17	0	1	1	1	0
14.15	2	5	7	3	1
12.13	5	15	20	7	1
10.11	3	8	11	4	1
8.9	1	1	1	1	1
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
					550

27 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	+	+	0
22.23	+	+	+	+	0
20.21	+	1	3	2	+
18.19	2	6	7	3	1
16.17	2	10	11	5	2
14.15	2	8	9	4	3
12.13	1	4	5	3	2
10.11	+	1	1	1	1
8.9	+	+	+	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					2002

0

≥ 34
0
1
0
+
+
2
+
1
0
0
07

31 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	+	0	0
22.23	+	+	+	0	0
20.21	+	+	1	+	+
18.19	1	5	3	2	1
16.17	3	9	11	6	3
14.15	4	10	11	9	5
12.13	1	3	4	3	2
10.11	+	1	1	+	1
8.9	0	0	0	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
					1924

32 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	+	+	+	0
22.23	+	2	5	5	1
20.21	2	8	15	14	4
18.19	1	6	12	6	2
16.17	1	2	4	3	2
14.15	+	+	1	1	1
12.13	0	0	0	0	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
					1146

33 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	0
14.15	0	+	+	0	0
12.13	+	1	1	+	+
10.11	2	5	10	7	5
8.9	3	10	17	10	6
6.7	2	4	7	4	2
4.5	+	1	1	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
					906

34 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	+	+
10.11	0	1	1	1	+
8.9	1	3	8	3	2
6.7	2	12	15	10	5
4.5	2	7	10	6	5
2.3	1	1	1	1	2
0.1	+	0	+	+	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
					1357

35 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	+	+	+	+	0
14.15	+	+	1	+	0
12.13	+	1	1	1	1
10.11	1	5	5	3	1
8.9	3	11	12	5	2
6.7	3	12	14	4	3
4.5	+	4	2	1	1
2.3	0	0	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
					909

36 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	0	+	0
10.11	+	1	2	2	3
8.9	+	5	6	9	6
6.7	+	7	10	9	5
4.5	+	3	6	7	3
2.3	+	1	3	1	2
0.1	0	0	1	1	2
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
					352

5

≥ 34
0
1
1
3
3
1
0
0
0
0
985

40 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	+	1	1	1	1
16.17	+	1	5	4	1
14.15	1	2	10	8	3
12.13	1	4	9	9	3
10.11	+	3	9	5	2
8.9	1	2	5	3	1
6.7	+	+	1	1	1
4.6	0	0	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
					987

41 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	+	1	1	1	1
6.7	+	3	7	7	6
4.6	1	9	14	14	11
2.3	1	4	7	5	4
0.1	+	+	1	1	+
-2.-1	0	0	0	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
					897

42 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	0	0	+	0
8.9	0	0	+	+	0
6.7	+	1	2	2	+
4.5	1	9	18	8	6
2.3	2	7	11	10	7
0.1	+	2	3	2	3
-2.-1	+	+	1	1	+
-4.-3	0	+	+	+	0
-6.-5	0	0	0	0	+
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
					593

43 — WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0.1	0	0	5	0	0
-2.-1	18	23	32	0	0
-4.-3	0	5	5	9	0
-6.-5	0	0	5	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0
-18.-17	0	0	0	0	0
-20.-19	0	0	0	0	0
					22

44

INSUFFICIENT DATA

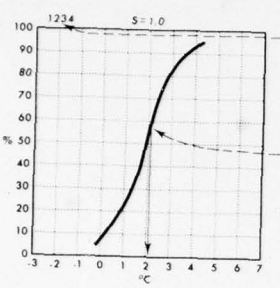
45

INSUFFICIENT DATA

nt the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

SEA S



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of *all observed sea surface temperatures were* ≤2.1°C or ≤35.8°F.)

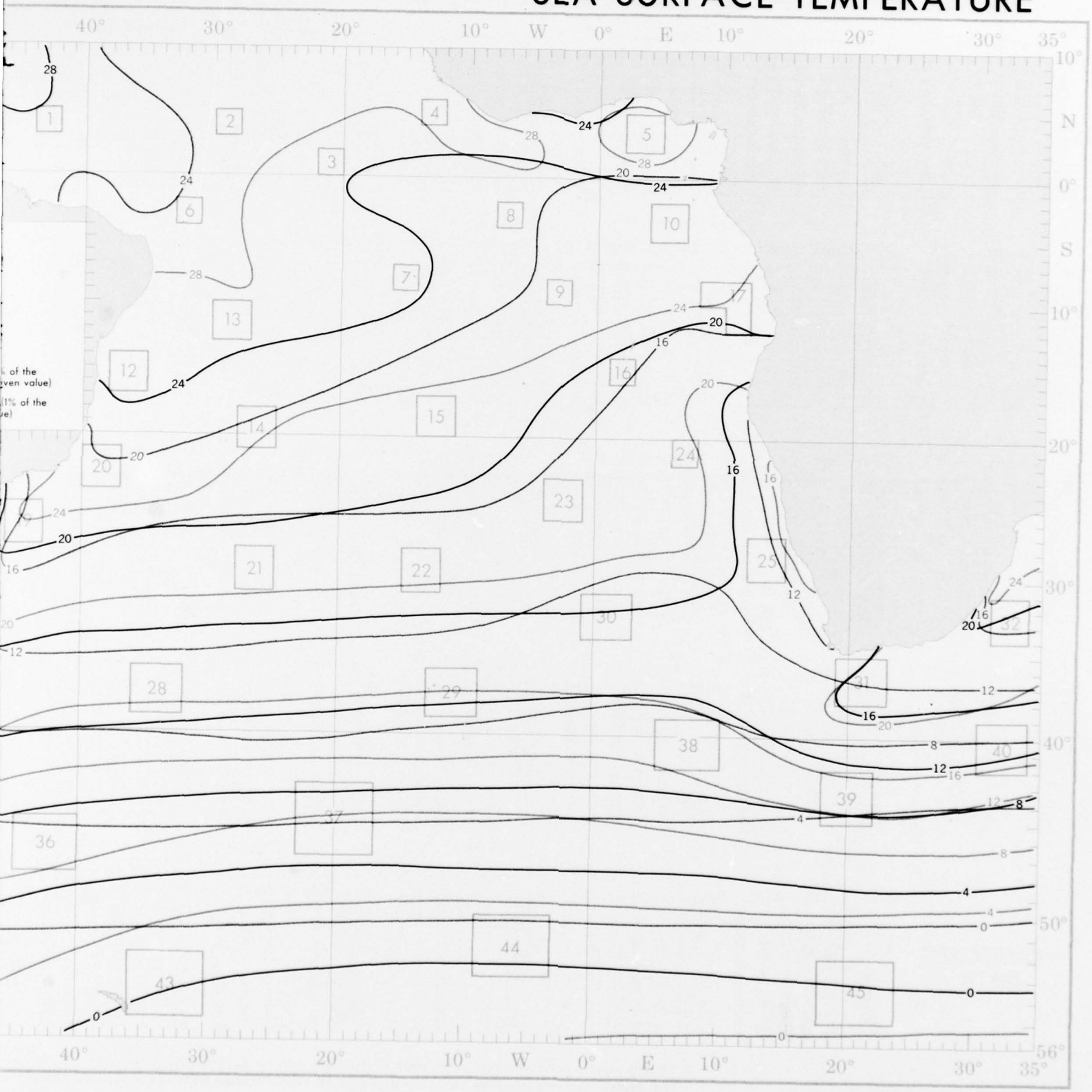
S - Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

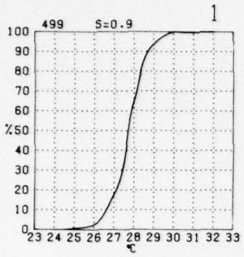
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

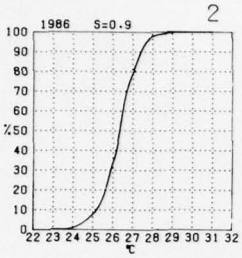
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

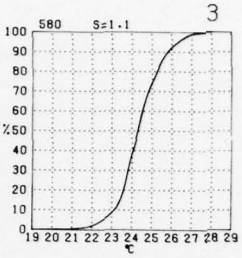
SEA SURFACE TEMPERATURE

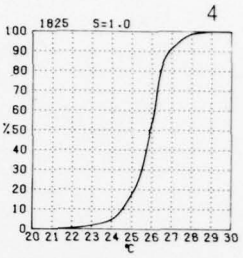


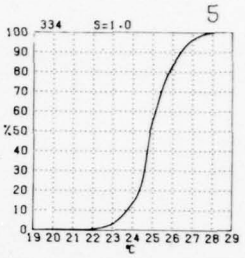
SEA SURFACE TEMPERATURE

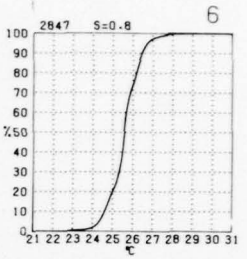


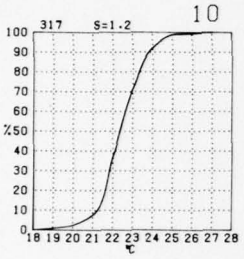


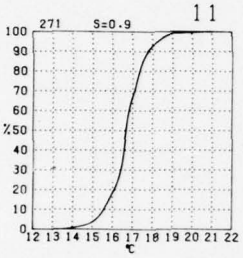


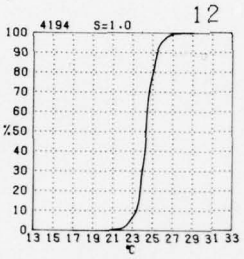


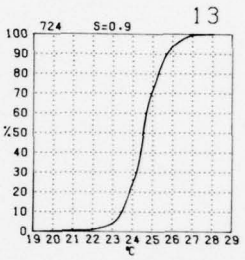


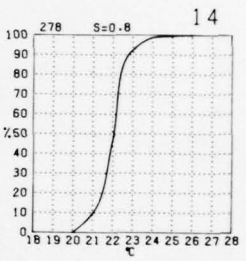


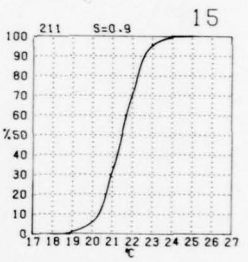


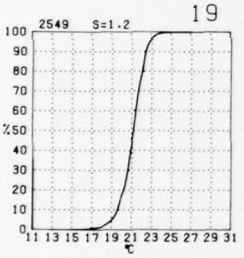


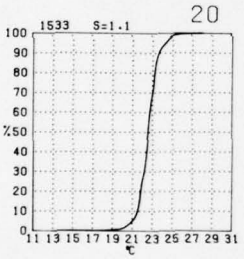


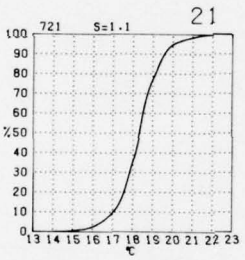


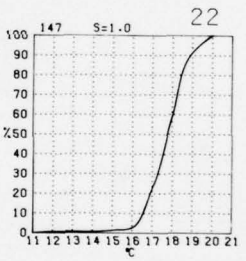


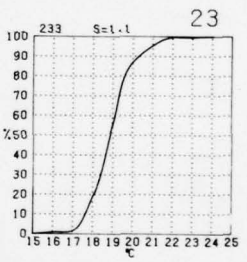


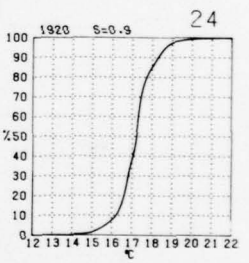


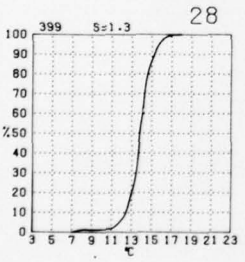


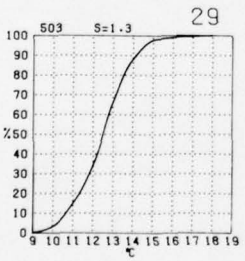


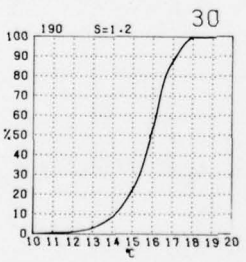


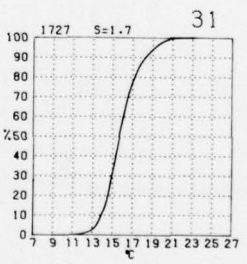


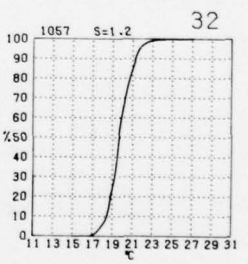


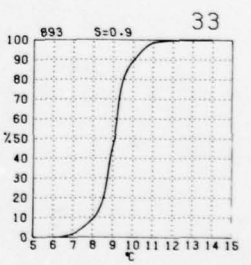






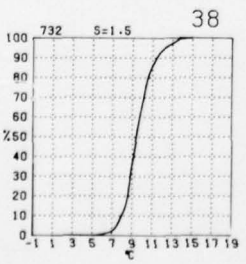


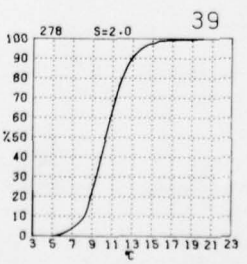


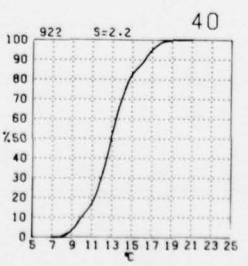


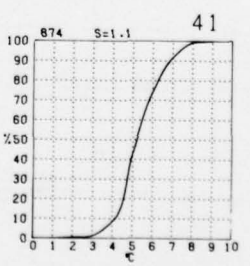
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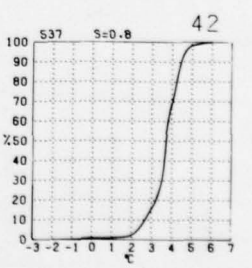
INSUFFICIENT DATA



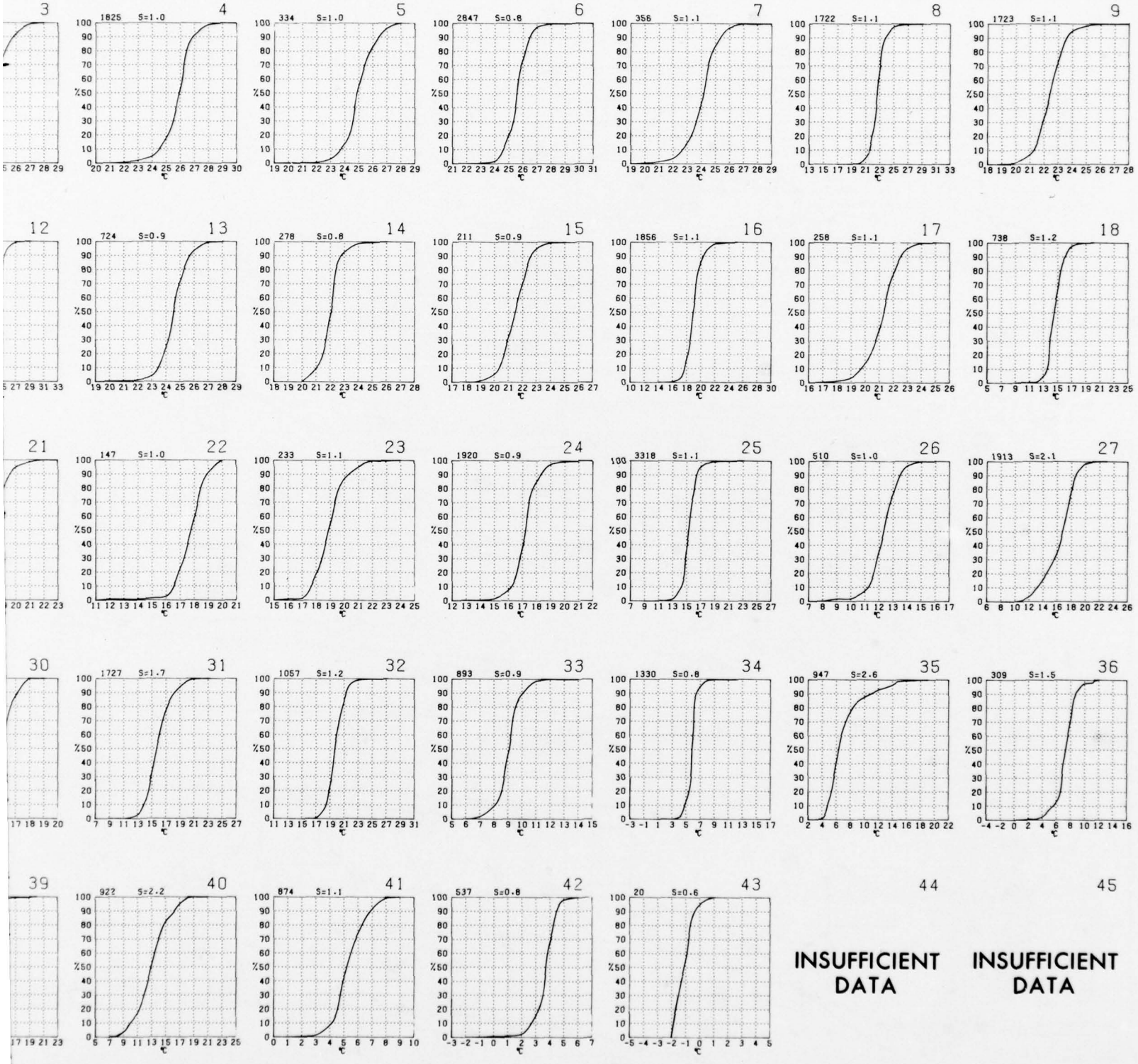








Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi



44

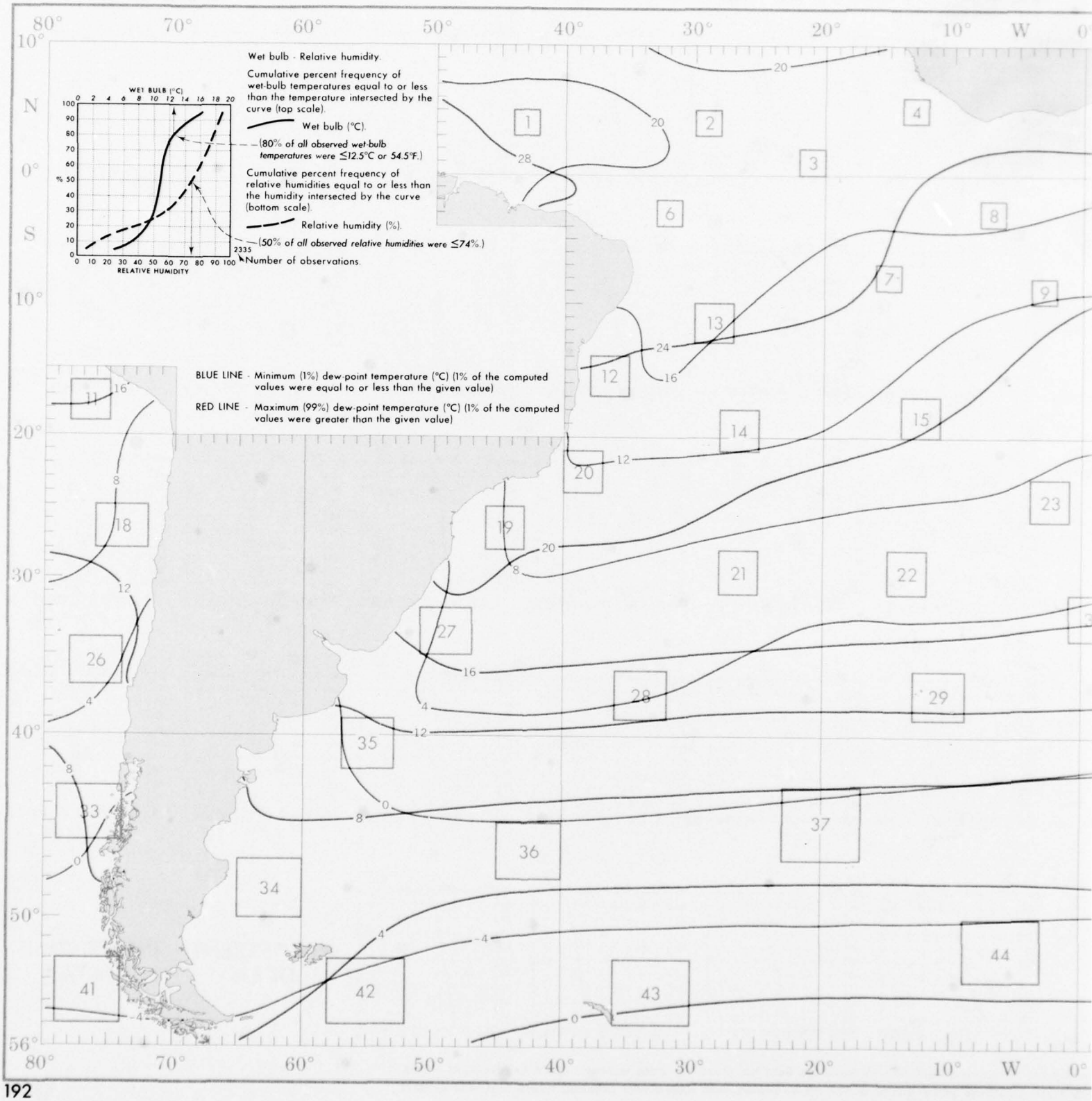
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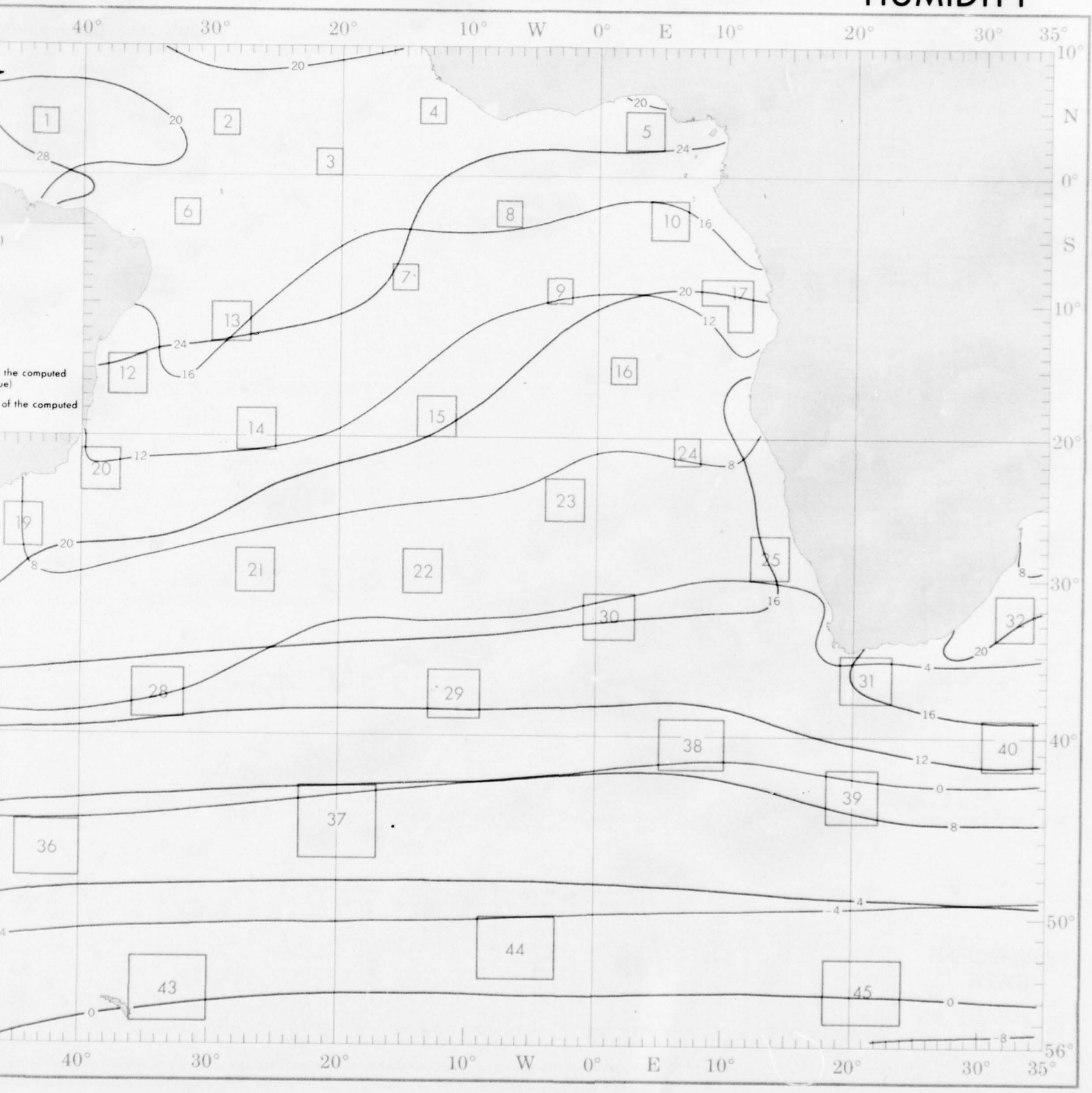
INSUFFICIENT DATA

present the objective compilation of available data for specified areas without regard to suspected biases.
th analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

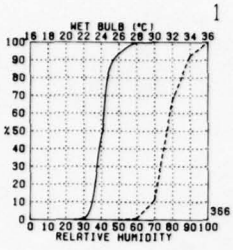
AUGUST

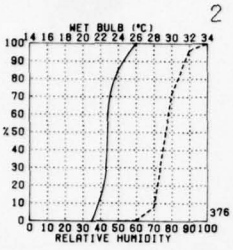

Wet bulb - Relative humidity.
Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).
Wet bulb (°C).
(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)
Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).
Relative humidity (%).
(50% of all observed relative humidities were ≤74%.)
2335
Number of observations.
WET BULB (°C)
RELATIVE HUMIDITY
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10°
20°
30°
40°
50°
56°
N
S

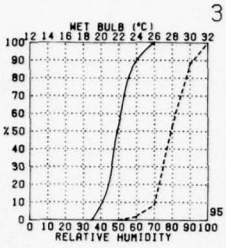
HUMIDITY

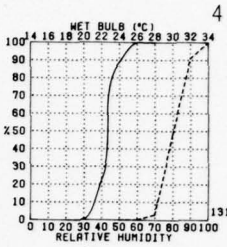

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 19 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 28 24 16 12 8 4 0
the computed
ue)
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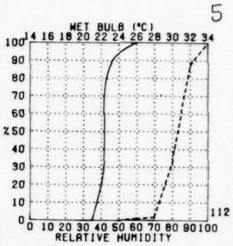
WET BULB AND RELATIVE HUMIDITY

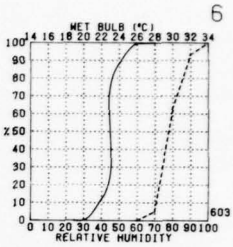
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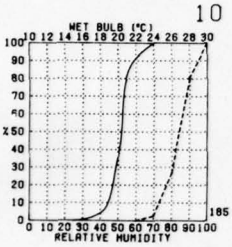
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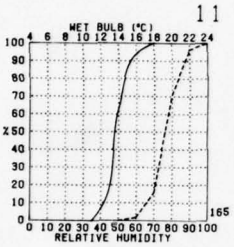
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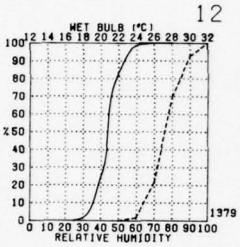
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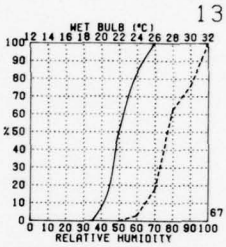
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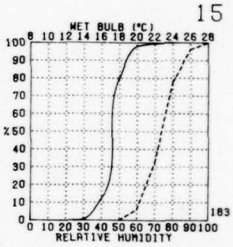
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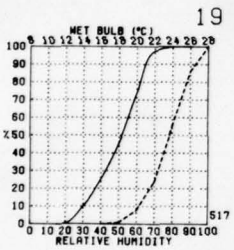
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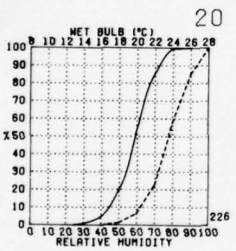
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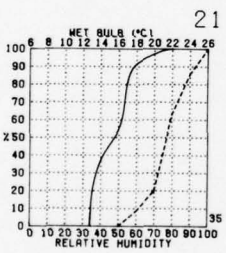
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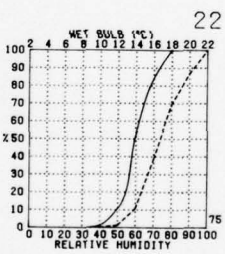
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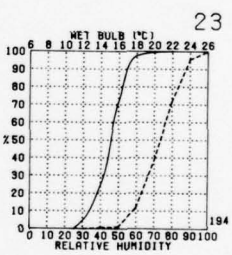
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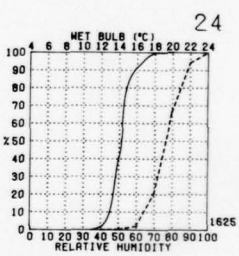
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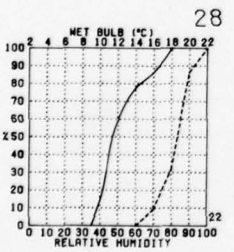
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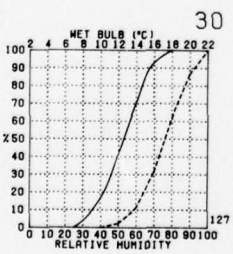
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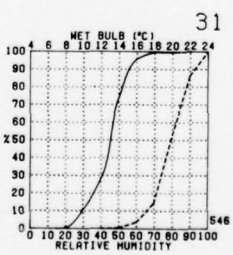
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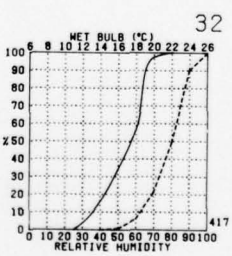
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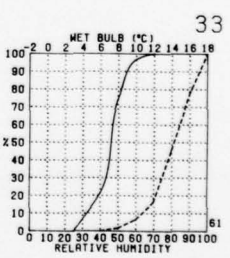
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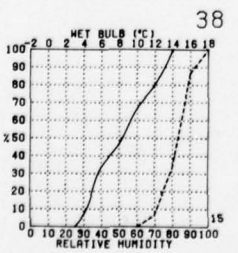
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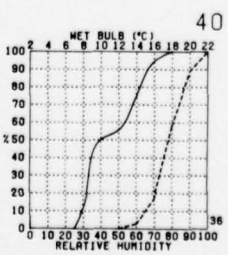
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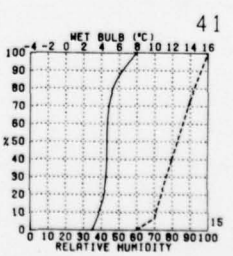
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INS

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

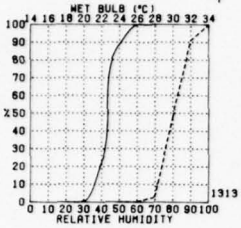
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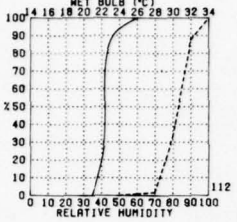
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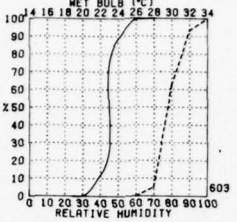
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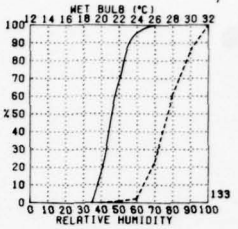
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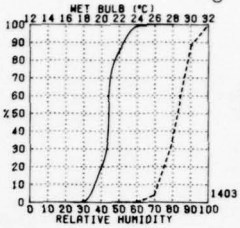
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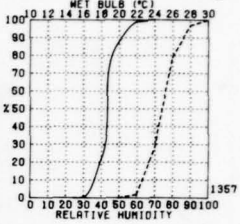
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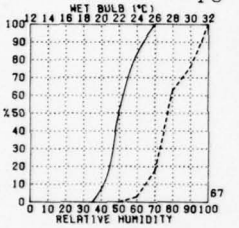
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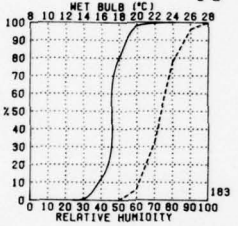
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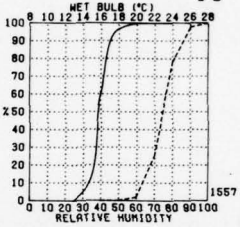
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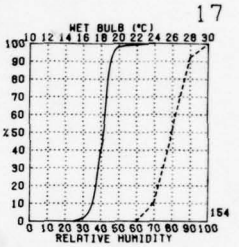
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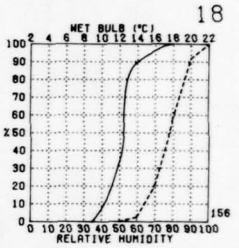
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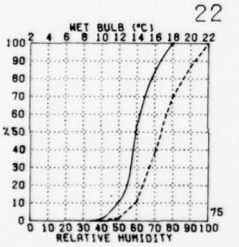
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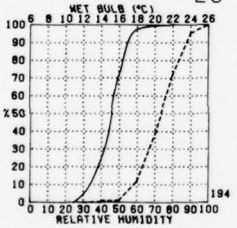
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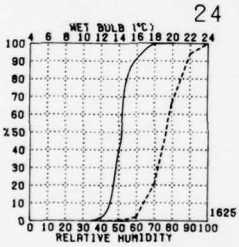
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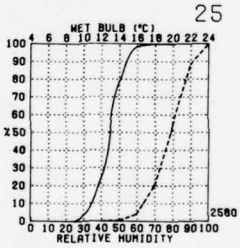
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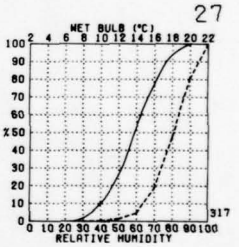
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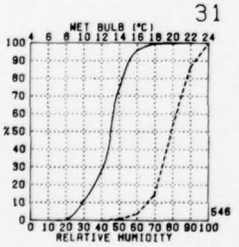
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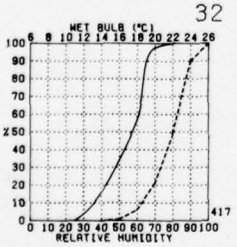
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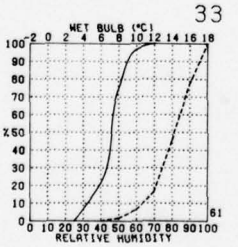
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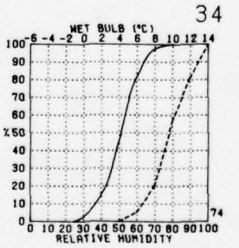
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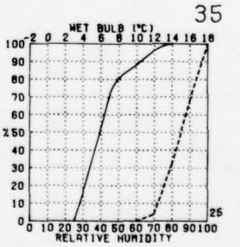
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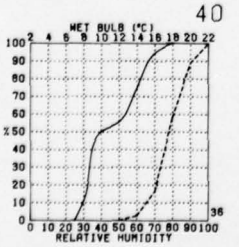
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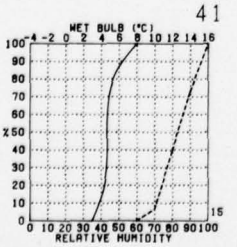
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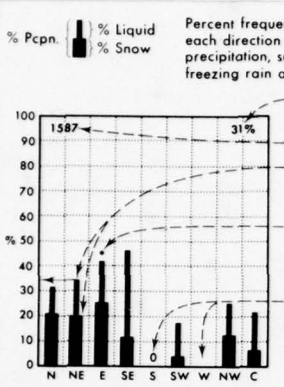
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INSUFFICIENT DATA

ssent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

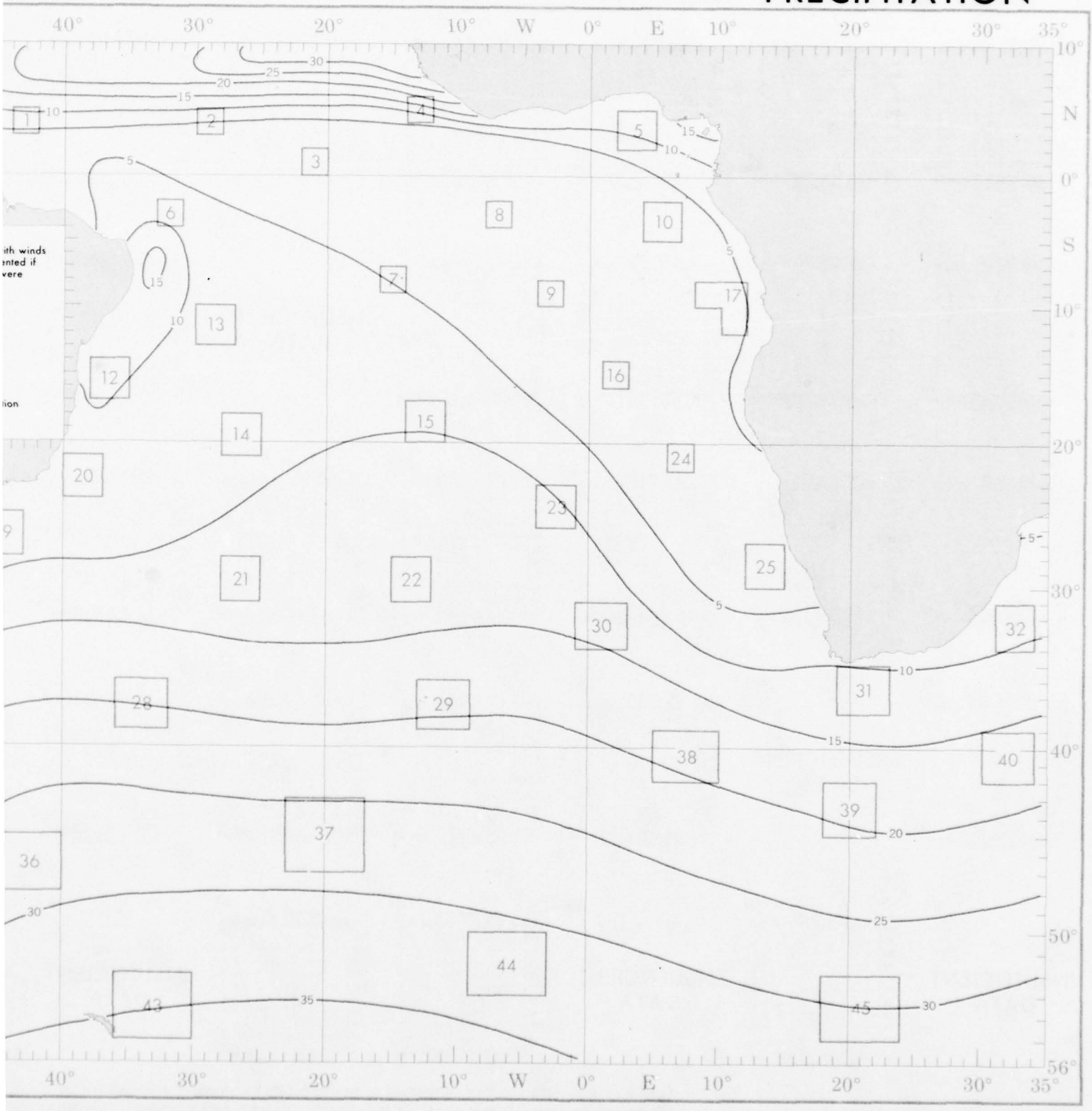
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

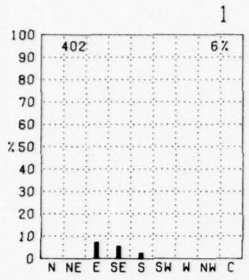
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

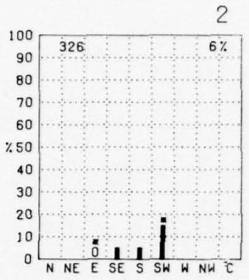
RED LINE - Percent frequency of observations reporting precipitation

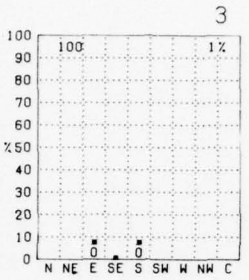
PRECIPITATION

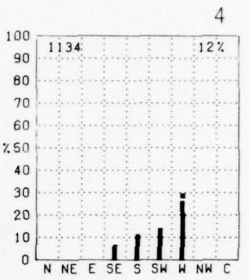


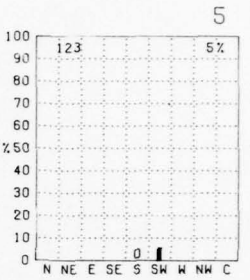
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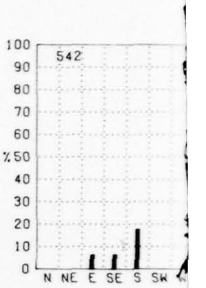


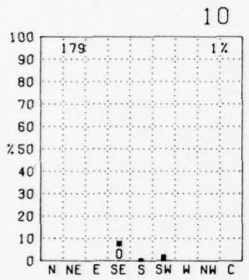


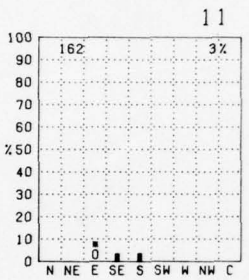


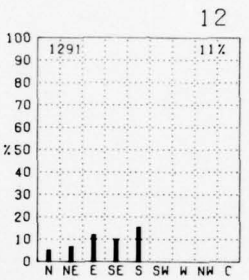


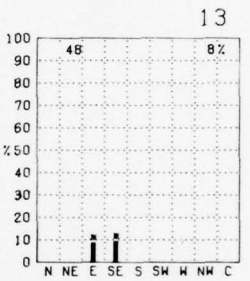






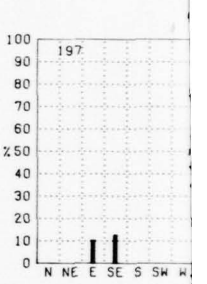


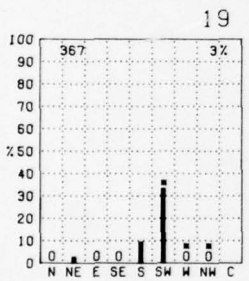


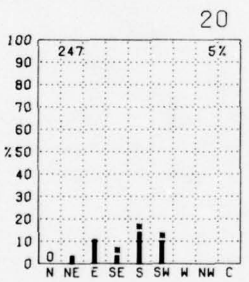


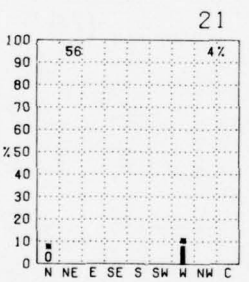
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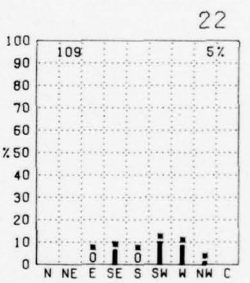
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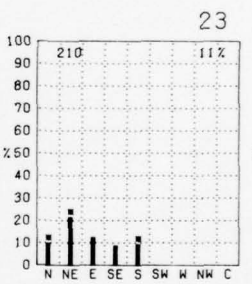


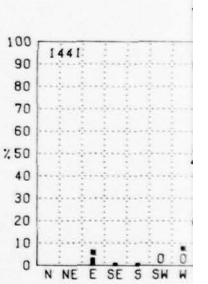






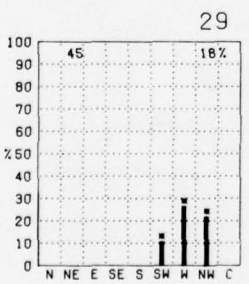


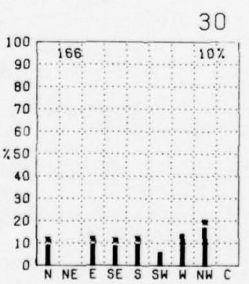


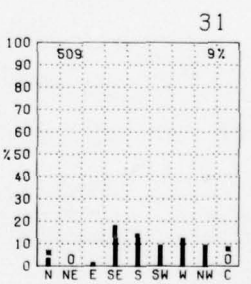


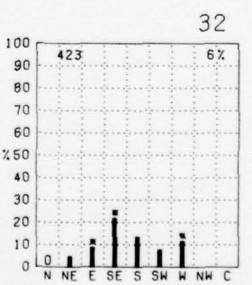
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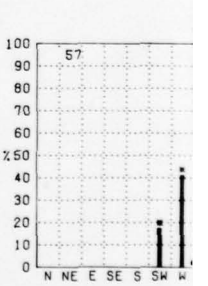
INSUFFICIENT DATA





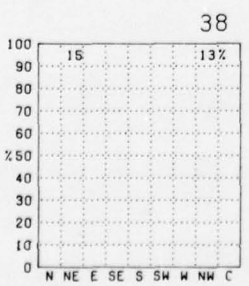






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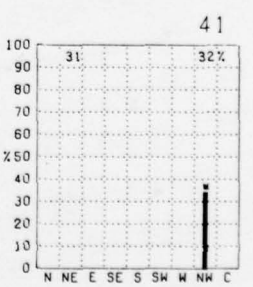


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INSUFFICIENT DATA

40

INSUFFICIENT DATA

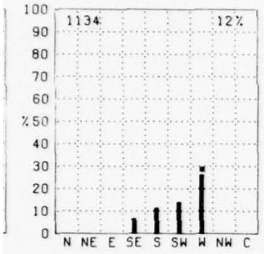


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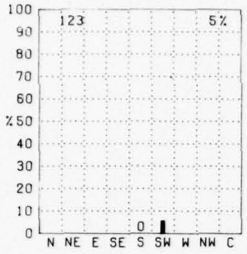
Graphs represent the objective compilation of available data for specified areas without reg
The isopleth analyses (opposite page) are based on all available data subjectively adjusted

AUGUST

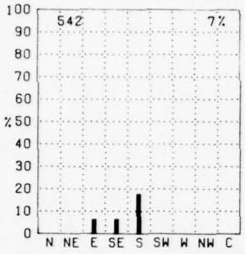
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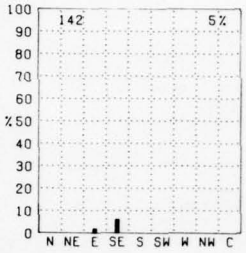
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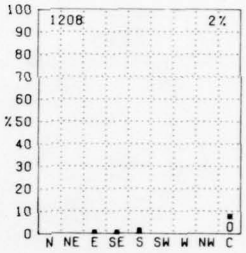
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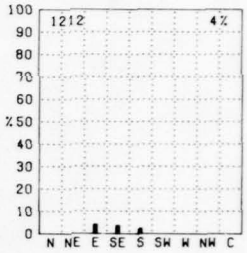
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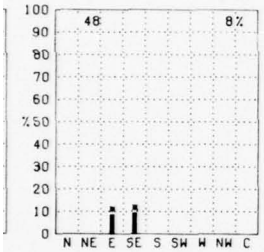
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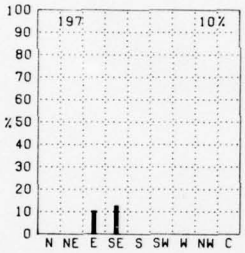
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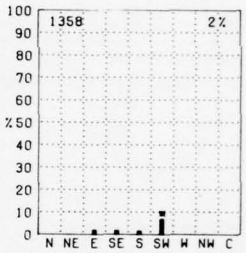
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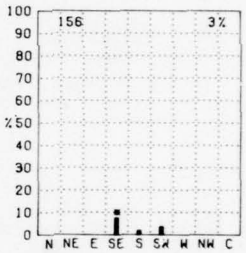
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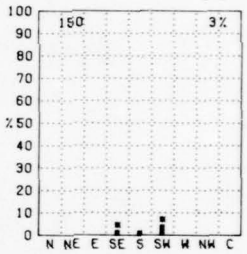
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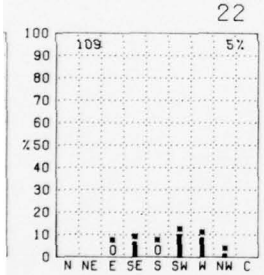
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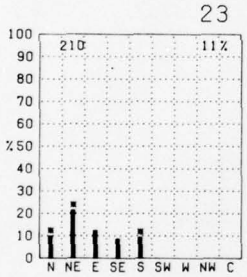
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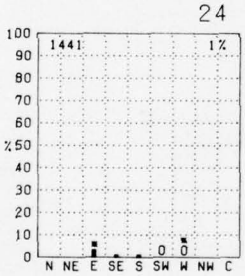
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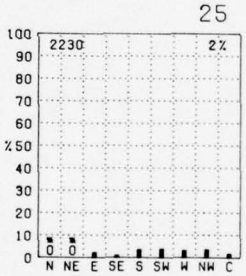
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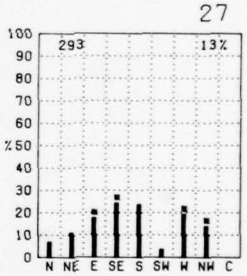
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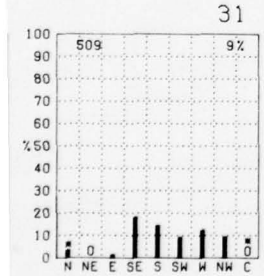
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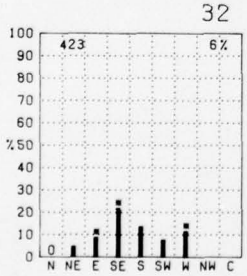
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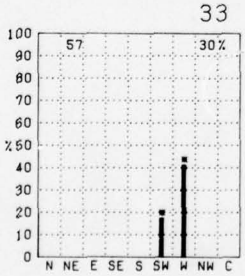
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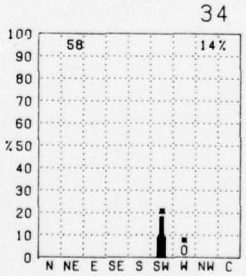
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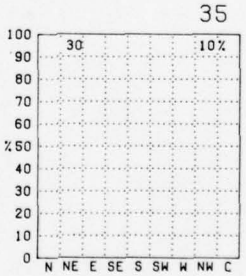
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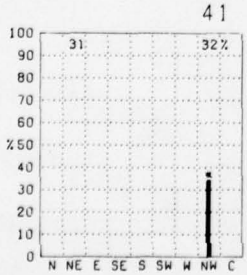
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INSUFFICIENT DATA

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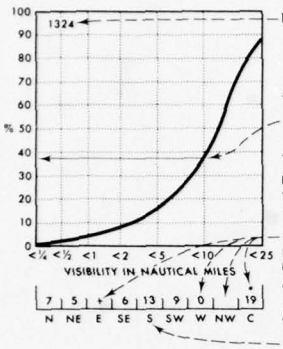
INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

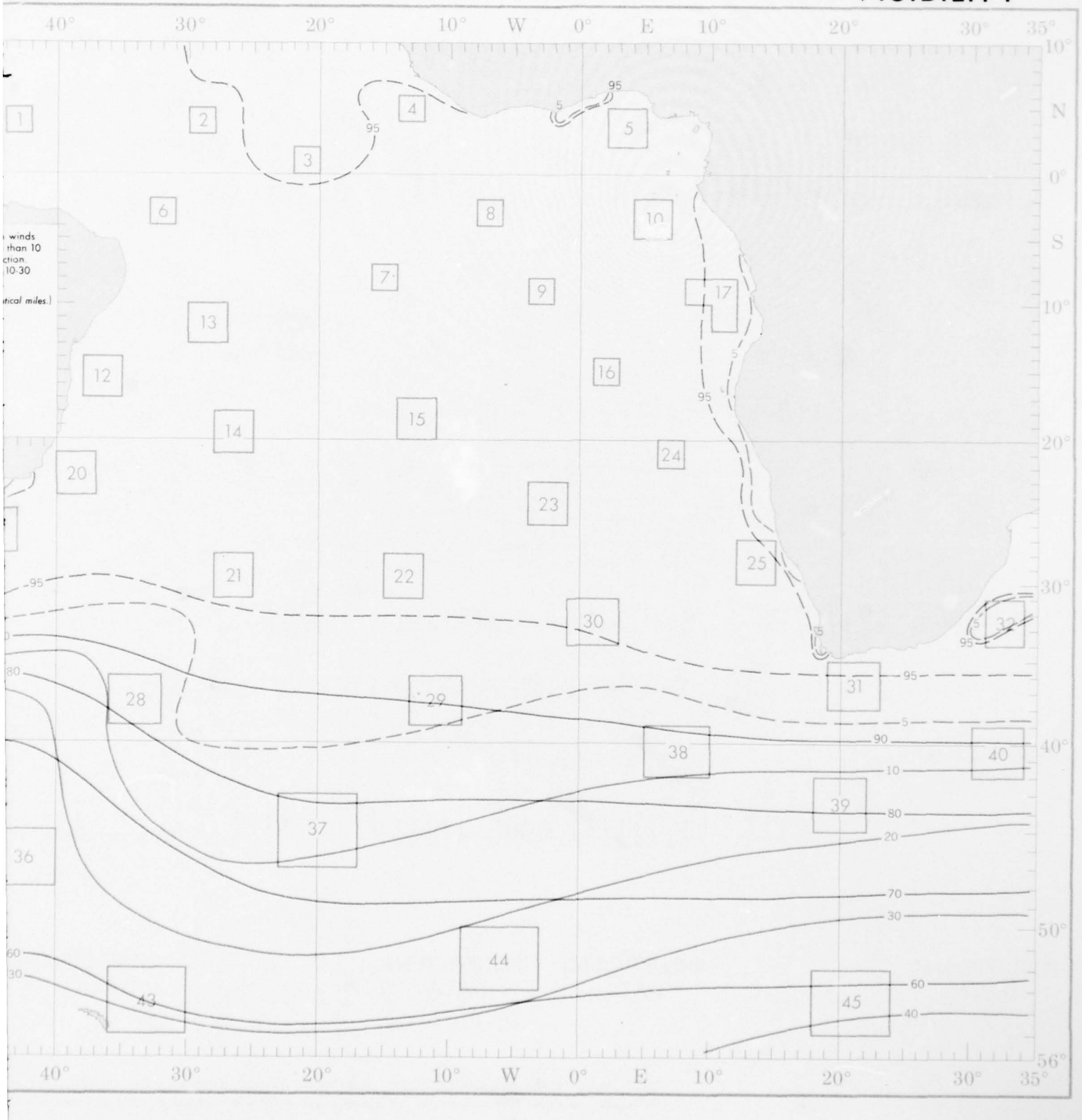
+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

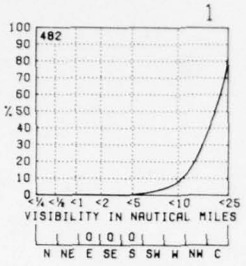
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

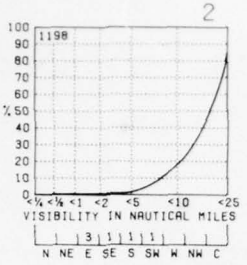
RED LINE - Percent frequency of visibilities <2 nautical miles

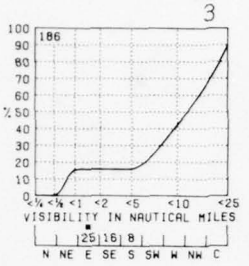
VISIBILITY

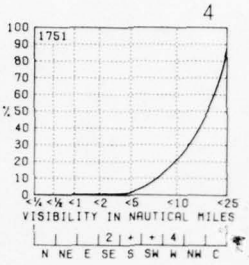

40°
30°
20°
10°
W
0°
E
10°
20°
30°
35°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
1
2
3
4
5
6
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8
9
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12
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winds
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10-30
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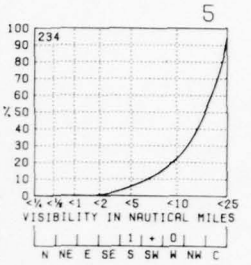
VISIBILITY

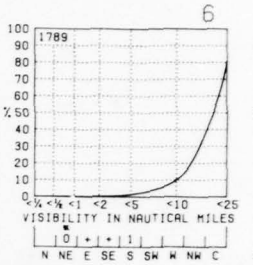


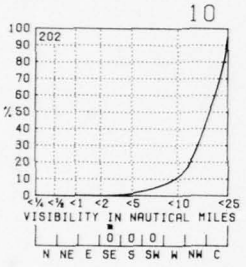


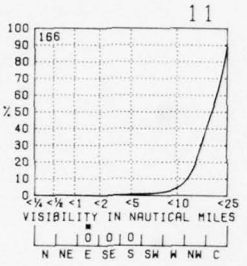


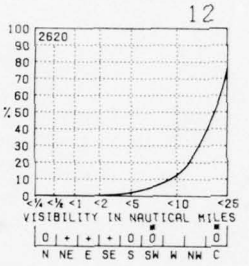


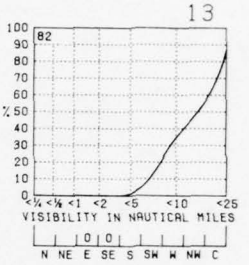


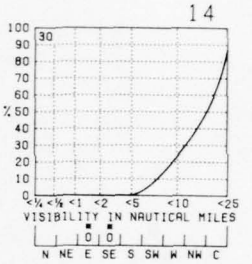


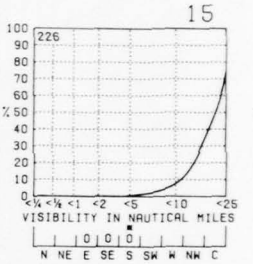


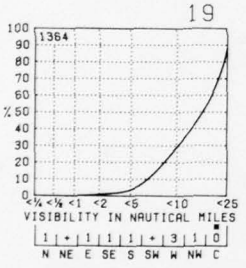


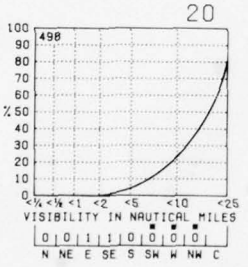


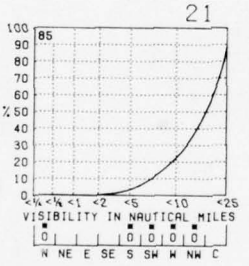


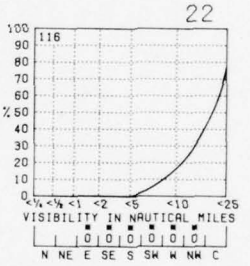


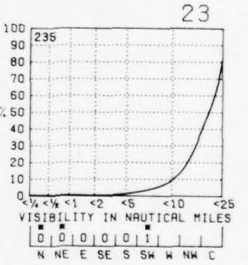


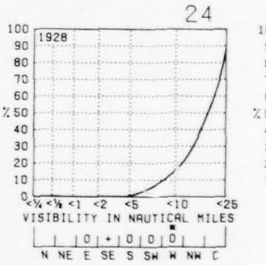


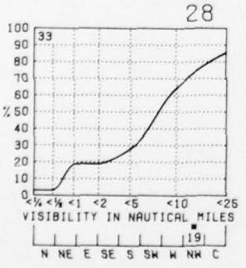


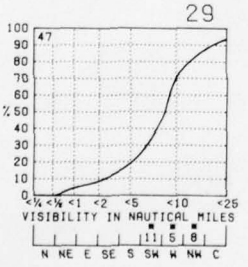


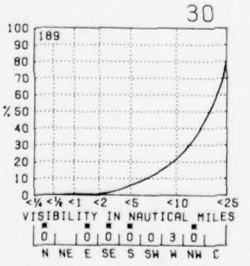


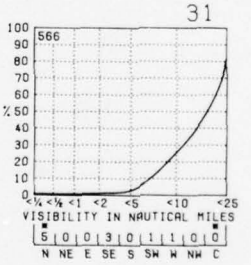


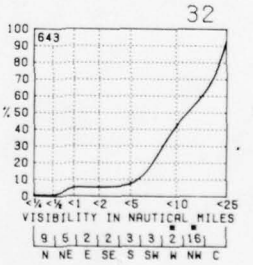


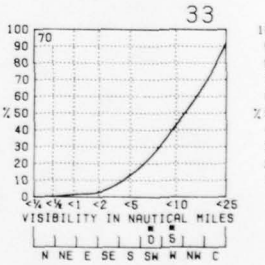






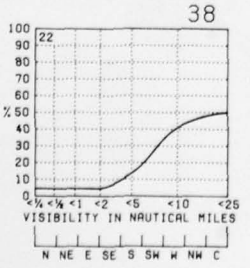






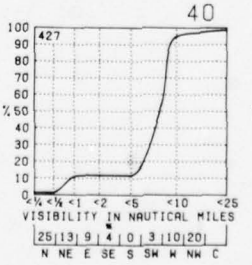
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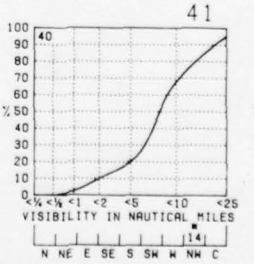
INSUFFICIENT DATA

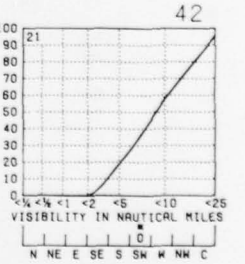


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INSUFFICIENT DATA

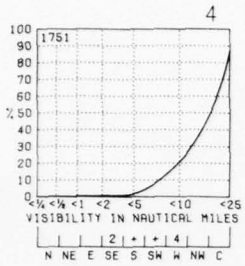


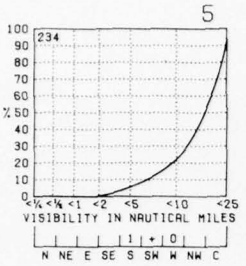


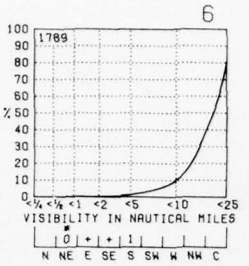


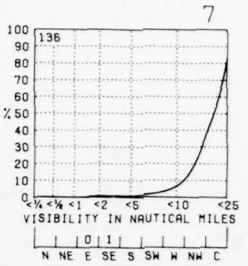
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The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

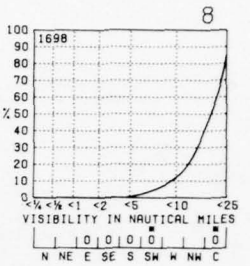
AUGUST

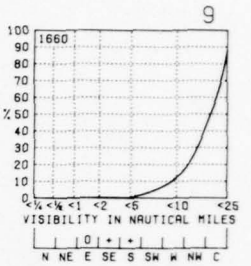


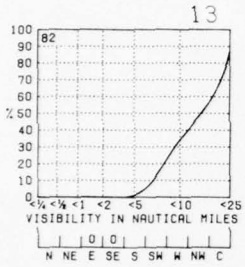


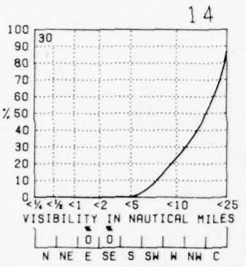


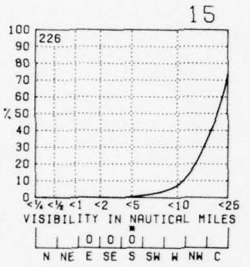


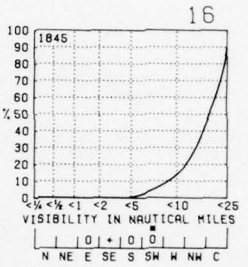


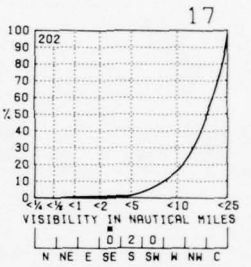


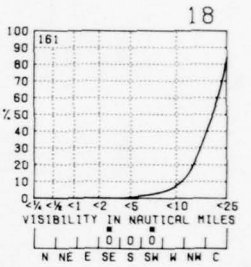


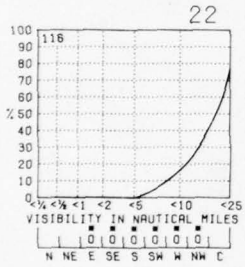


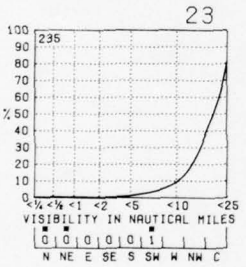


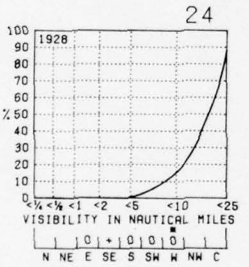


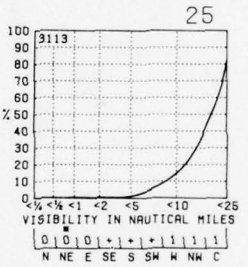






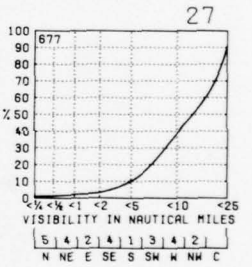


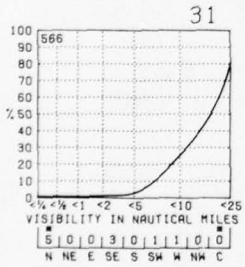


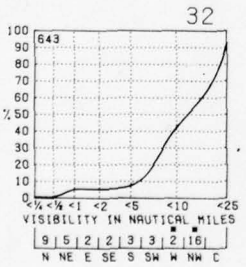


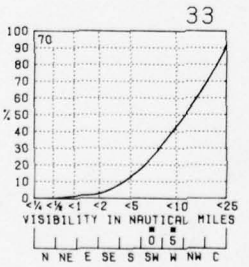
26

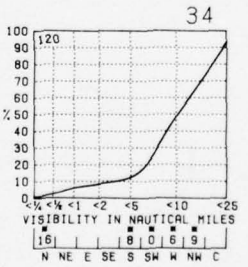
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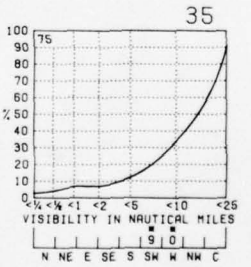






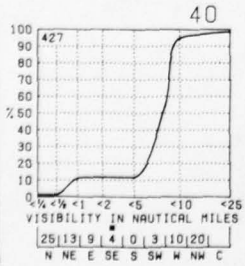


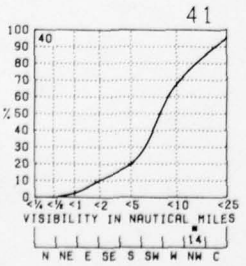


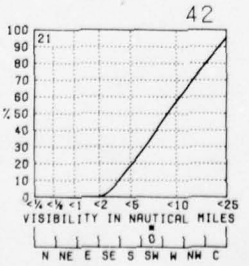


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43

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44

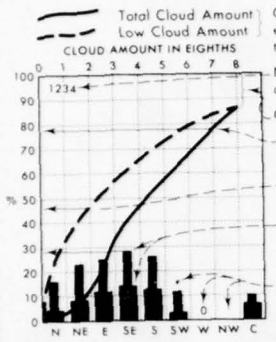
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45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
ies (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

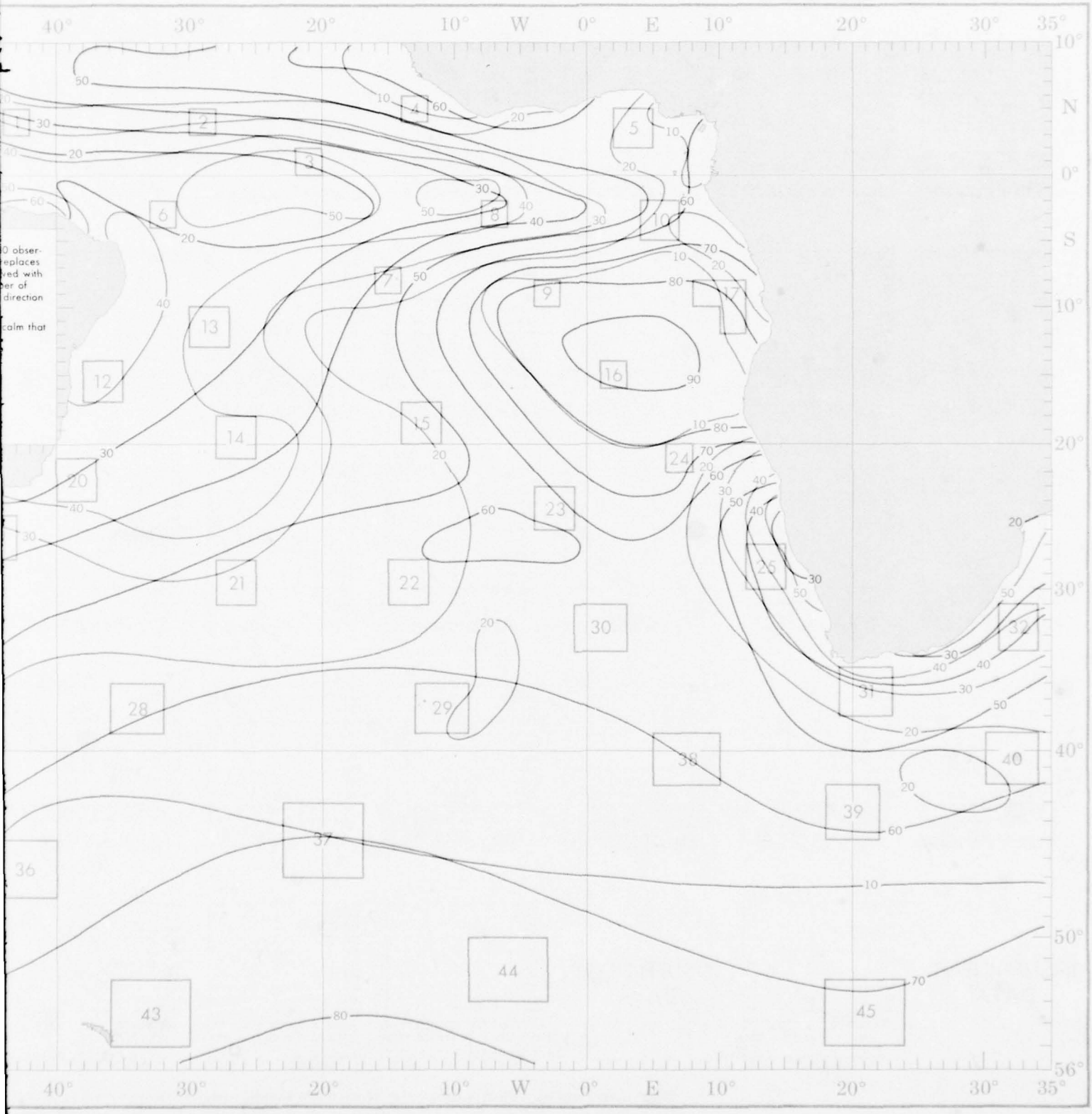


Low cloud amount. Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

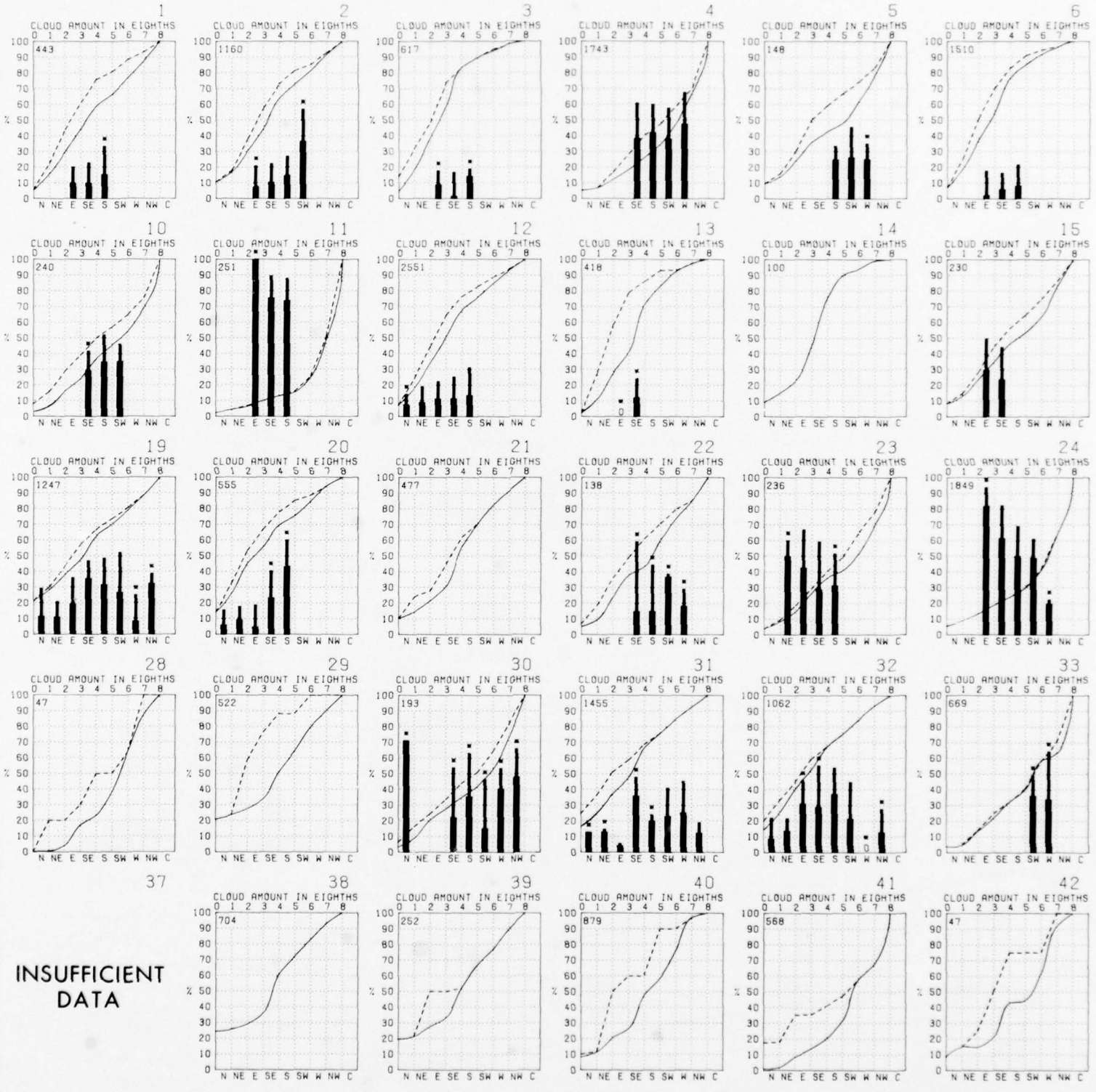
CLOUD COVER



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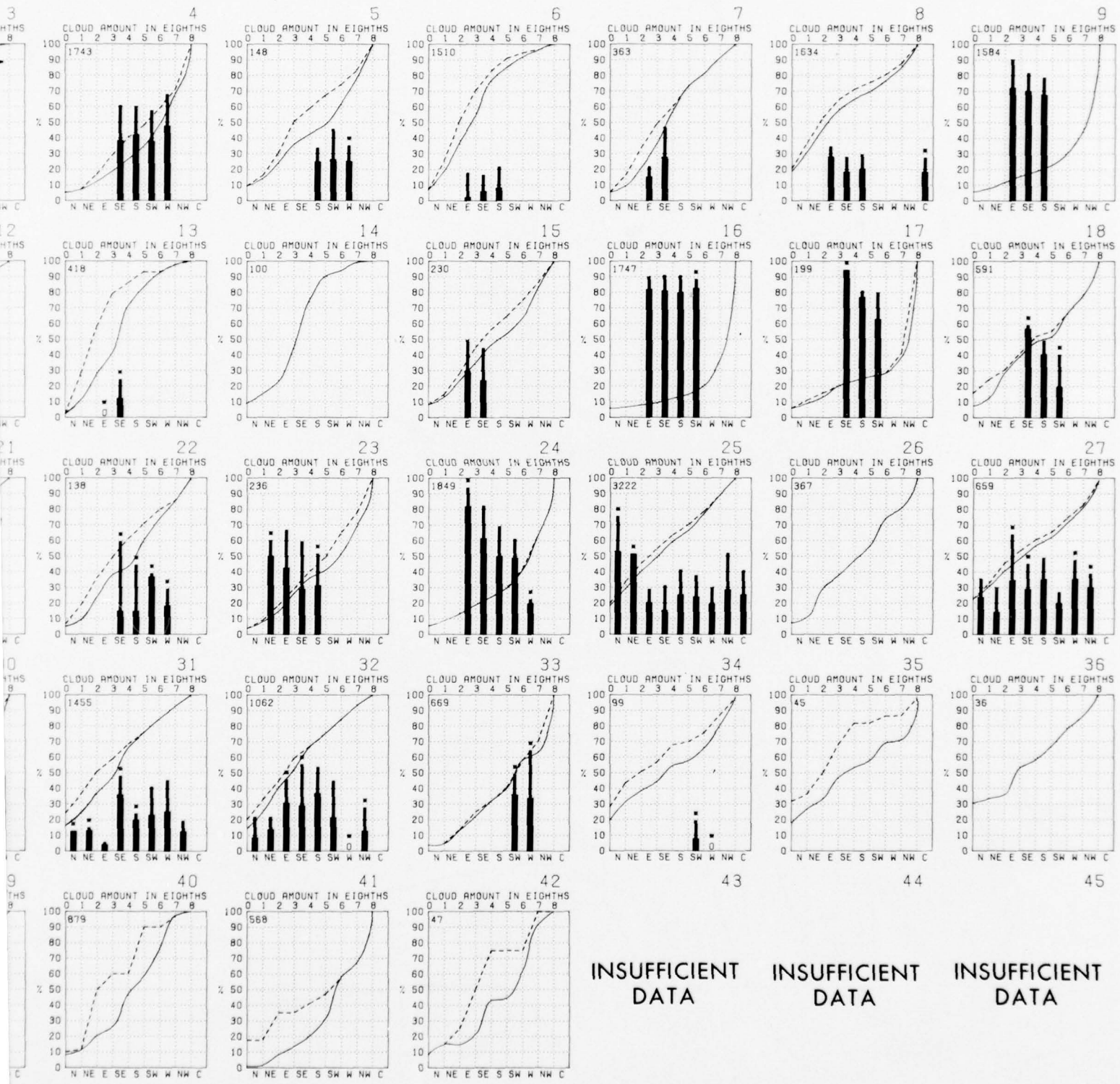
CLOUD COVER



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

AUGUST



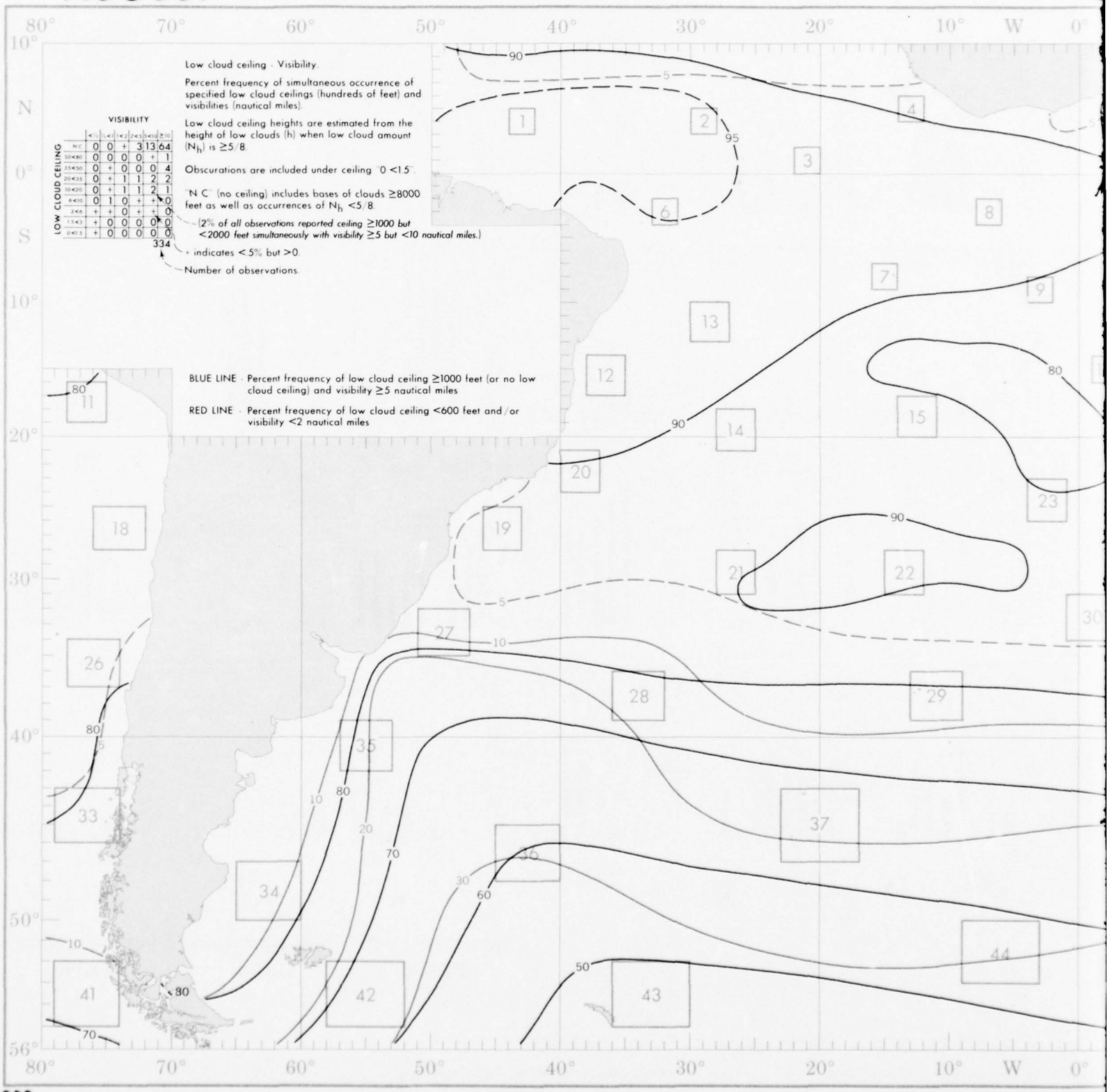
43 INSUFFICIENT DATA

44 INSUFFICIENT DATA

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alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates <.5% but >0.
Number of observations.
VISIBILITY
LOW CLOUD CEILING
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	75
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	+	3
10<20	0	0	0	0	1	9
6<10	0	0	0	0	2	6
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

369

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	71
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	4
10<20	0	0	+	+	+	10
6<10	0	0	0	0	2	3
3<6	0	0	0	0	0	+
1.5<3	+	0	0	0	0	0
0<1.5	0	0	0	0	0	0

354

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	80
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	0	0	1
10<20	0	0	0	0	2	6
6<10	0	0	0	0	1	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

97

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	39
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	13
10<20	0	+	+	+	3	22
6<10	0	0	+	+	2	9
3<6	0	0	0	+	1	+
1.5<3	0	0	+	0	0	0
0<1.5	+	0	0	0	+	+

1189

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	1	2	9
10<20	0	0	0	0	3	13
6<10	0	0	0	0	2	7
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

121

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	80
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	1
20<35	0	+	0	0	+	3
10<20	0	0	0	0	+	7
6<10	0	0	+	0	1	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

580

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	49
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	5
20<35	0	0	0	1	1	8
10<20	0	0	0	0	5	19
6<10	0	0	0	0	0	8
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

173

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	12
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	22
10<20	0	0	0	0	0	44
6<10	0	0	0	0	0	18
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

139

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	2	74
50<80	0	0	0	+	0	1
35<50	0	0	0	+	+	2
20<35	0	0	+	+	+	3
10<20	0	0	0	+	1	7
6<10	0	0	0	+	1	3
3<6	0	+	0	+	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	+	+

1367

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	83
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	2
10<20	0	0	0	0	0	5
6<10	0	0	0	0	0	5
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

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INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	55
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	5
20<35	0	0	0	0	0	6
10<20	0	0	0	0	3	14
6<10	0	0	0	1	1	11
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

194

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	5	62
50<80	0	0	0	0	+	1
35<50	0	0	0	+	2	6
20<35	0	0	0	1	2	6
10<20	0	0	0	+	3	6
6<10	0	0	0	0	1	3
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

450

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	4	8	67
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	3
20<35	0	0	0	0	2	3
10<20	0	0	0	0	2	5
6<10	0	0	0	0	1	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

247

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	11	50
50<80	0	0	0	0	0	4
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	11
10<20	0	0	0	7	0	11
6<10	0	0	0	0	0	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

28

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	57
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	7
10<20	0	0	0	0	9	20
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

70

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	3	38
50<80	0	0	0	0	0	3
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	9
10<20	0	0	0	0	2	24
6<10	0	0	0	1	2	12
3<6	0	0	0	0	1	1
1.5<3	0	0	0	1	0	1
0<1.5	0	0	0	0	0	0

195

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	21
50<80	0	0	0	0	+	2
35<50	0	0	0	+	1	6
20<35	0	0	0	+	1	19
10<20	0	0	0	+	3	32
6<10	0	0	0	+	3	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	+	0	1
0<1.5	0	0	0	0	+	+

1479

28

INSUFFICIENT DATA

29

INSUFFICIENT DATA

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	42
50<80	0	0	0	0	1	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	12
10<20	0	0	0	4	8	15
6<10	0	1	0	2	3	8
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

118

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	6	64
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	+	1	4
10<20	+	0	0	1	1	8
6<10	0	0	1	+	2	5
3<6	0	0	0	+	0	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

339

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	12	54
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	4
10<20	0	0	0	1	3	11
6<10	0	0	0	1	3	4
3<6	0	0	+	+	0	0
1.5<3	0	0	0	+	+	+
0<1.5	0	0	0	0	+	+

401

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	29
50<80	0	0	0	0	0	0
35<50	0	0	0	0	4	0
20<35	0	0	0	2	4	7
10<20	0	0	0	0	11	13
6<10	0	2	0	5	7	9
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	2	0	2	0

56

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	13	31
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	6	0
10<20	0	0	0	6	25	13
6<10	0	0	0	0	6	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

16

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

AUGUST

4

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	39
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	13
10<20	0	+	+	+	3	22
6<10	0	0	+	+	2	9
3<6	0	0	0	+	1	+
1.5<3	0	0	+	0	0	0
0<1.5	+	0	0	0	+	+

1189

5

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	1
20<35	0	0	0	1	2	9
10<20	0	0	0	0	3	13
6<10	0	0	0	0	2	7
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

121

6

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	80
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	1
20<35	0	+	0	0	+	3
10<20	0	0	0	0	+	7
6<10	0	0	+	0	1	3
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

580

7

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	1	0	2	58
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	8
10<20	0	0	0	0	1	17
6<10	0	0	0	0	0	9
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

112

8

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	69
50<80	0	0	0	+	+	1
35<50	0	0	0	0	+	2
20<35	0	0	0	+	+	7
10<20	0	0	0	0	1	12
6<10	0	0	0	0	1	3
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1275

9

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	18
50<80	0	0	0	+	0	2
35<50	0	0	0	+	1	7
20<35	0	0	+	0	1	23
10<20	0	0	+	0	2	33
6<10	0	0	0	+	1	11
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

1242

13

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	83
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	2
10<20	0	0	0	0	0	5
6<10	0	0	0	0	0	5
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

41

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	55
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	5
20<35	0	0	0	0	0	6
10<20	0	0	0	0	3	14
6<10	0	0	0	1	1	11
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

194

16

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	10
50<80	0	0	0	+	+	2
35<50	0	0	0	+	1	8
20<35	0	0	0	+	1	23
10<20	0	0	0	0	3	40
6<10	0	0	0	+	2	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	+

1407

17

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	20
50<80	0	0	0	0	0	3
35<50	0	0	0	0	1	6
20<35	0	0	0	0	1	14
10<20	0	0	0	0	3	36
6<10	0	0	0	0	3	11
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

146

18

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	53
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	5
10<20	0	0	0	0	1	23
6<10	0	0	0	0	0	12
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

130

22

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	57
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	7
10<20	0	0	0	0	9	20
6<10	0	0	0	0	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

70

23

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	1	0	0	0	3	38
50<80	0	0	0	0	0	3
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	9
10<20	0	0	0	0	2	24
6<10	0	0	0	1	2	12
3<6	0	0	0	0	1	1
1.5<3	0	0	0	1	0	1
0<1.5	0	0	0	0	0	0

195

24

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	21
50<80	0	0	0	0	+	2
35<50	0	0	0	+	1	6
20<35	0	0	0	+	1	19
10<20	0	0	0	+	3	32
6<10	0	0	0	+	3	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	+	0	0
0<1.5	0	0	0	0	+	+

1479

25

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	4	60
50<80	0	0	0	0	+	1
35<50	0	0	0	+	+	3
20<35	0	0	0	+	1	8
10<20	0	0	0	+	1	14
6<10	0	0	0	+	1	4
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	+	0	0	0	+

2276

26

INSUFFICIENT DATA

27

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	6	53
50<80	0	0	0	+	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	1	2	6
10<20	0	1	+	+	4	8
6<10	0	0	0	2	3	4
3<6	0	+	0	0	1	+
1.5<3	0	0	0	+	0	0
0<1.5	1	+	0	+	1	0

264

31

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	0	1	6	64
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	+	1	4
10<20	+	0	0	1	1	8
6<10	0	0	1	+	2	5
3<6	0	0	0	+	0	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

339

32

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	12	54
50<80	0	0	0	0	+	1
35<50	0	0	0	0	1	3
20<35	0	0	0	+	1	4
10<20	0	0	0	1	3	11
6<10	0	0	0	1	3	4
3<6	0	0	+	+	0	0
1.5<3	0	0	0	+	+	+
0<1.5	0	0	0	0	+	+

401

33

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	29
50<80	0	0	0	0	0	0
35<50	0	0	0	0	4	0
20<35	0	0	0	2	4	7
10<20	0	0	0	0	11	13
6<10	0	2	0	5	7	9
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	2	0	2	0

56

34

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	65
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	4
20<35	0	0	0	0	2	8
10<20	0	0	2	0	6	4
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	2	2	0	0	0

49

35

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	10	71
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	10	5
6<10	0	0	0	0	5	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

21

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	13	31
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	6	0
10<20	0	0	0	6	25	13
6<10	0	3	0	0	6	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

16

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

45

INSUFFICIENT DATA

bjective compilation of available data for specified areas without regard to suspected biases.
pposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.

Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is $\geq 5/8$.

(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)

N C (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.

+ indicates < 5% but >0.

1234 ◄ Number of observations.

WIND SPEED (knots)

LCC \ Vsby	0-3	4-10	11-21	22-33	≥34
<1.5 & or <5	+	1	1	+	0
<6 & or <2	2	2	1	1	+
Vsby <2	1	2	1	1	+
<10 & or <2	3	4	2	1	1
<20 & or <5	8	9	6	5	2
Vsby ≥5	9	11	12	3	1
≥30 & ≥5	12	13	15	7	3
N C & ≥10	4	2	1	+	0

Conditions for Carrier Operations

BLUE LINE - Percent frequency of optimum conditions: LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.

RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.

Satisfactory conditions between poor and optimum

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	+	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	4	4	+	0
<20 & OR <5	1	8	9	1	0
VSBY ≥5	3	41	54	1	0
≥50 & ≥5	1	31	43	1	0
NC & ≥10	1	30	43	1	0

369

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	+	0
VSBY <2	0	0	+	+	0
<10 & OR <2	1	2	2	+	0
<20 & OR <5	1	6	9	1	0
VSBY ≥5	2	44	50	2	0
≥50 & ≥5	1	34	39	1	0
NC & ≥10	1	32	37	1	0

354

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	4	3	0	0
<20 & OR <5	2	7	7	0	0
VSBY ≥5	3	48	47	1	0
≥50 & ≥5	1	39	40	1	0
NC & ≥10	1	39	39	1	0

97

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	5	7	1	0
<20 & OR <5	1	14	22	1	0
VSBY ≥5	2	39	55	2	0
≥50 & ≥5	1	19	22	1	0
NC & ≥10	1	18	20	1	0

1188

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	3	0	0
<20 & OR <5	0	16	11	0	0
VSBY ≥5	3	48	49	0	0
≥50 & ≥5	3	28	32	0	0
NC & ≥10	3	28	31	0	0

120

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	1	3	0	0
<20 & OR <5	0	2	10	+	0
VSBY ≥5	0	26	71	2	0
≥50 & ≥5	0	22	59	2	0
NC & ≥10	0	21	56	2	0

579

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	2	0	0
<20 & OR <5	5	20	8	0	0
VSBY ≥5	13	66	19	0	0
≥50 & ≥5	8	36	9	0	0
NC & ≥10	8	33	9	0	0

171

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	6	12	0	0
<20 & OR <5	6	17	35	5	0
VSBY ≥5	6	30	57	7	0
≥50 & ≥5	0	6	6	0	0
NC & ≥10	0	6	6	0	0

139

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	2	4	+	0
<20 & OR <5	+	7	9	1	0
VSBY ≥5	3	51	41	3	0
≥50 & ≥5	2	42	30	2	0
NC & ≥10	2	41	28	2	0

1360

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	8	0	0
<20 & OR <5	0	0	10	3	0
VSBY ≥5	0	20	75	5	0
≥50 & ≥5	0	20	63	3	0
NC & ≥10	0	20	60	3	0

40

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	9	2	0
<20 & OR <5	2	6	19	5	0
VSBY ≥5	8	21	58	12	0
≥50 & ≥5	6	12	35	5	0
NC & ≥10	6	12	33	4	0

191

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	1	3	2	0
<20 & OR <5	+	4	8	4	0
VSBY ≥5	3	36	44	15	0
≥50 & ≥5	2	28	30	8	0
NC & ≥10	2	25	28	7	0

440

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	2	1	0
<20 & OR <5	0	5	9	1	0
VSBY ≥5	2	42	47	5	0
≥50 & ≥5	2	36	36	3	0
NC & ≥10	1	32	32	3	0

241

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	0	0	0
<20 & OR <5	0	11	11	4	0
VSBY ≥5	4	32	46	11	0
≥50 & ≥5	0	21	32	11	0
NC & ≥10	0	14	29	7	0

28

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	0	1	0
<20 & OR <5	0	11	13	7	0
VSBY ≥5	9	33	49	10	0
≥50 & ≥5	9	20	29	3	0
NC & ≥10	9	19	27	3	0

70

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	2	1	2	0
VSBY <2	0	1	0	0	0
<10 & OR <2	0	7	7	5	0
<20 & OR <5	2	15	22	6	0
VSBY ≥5	6	38	42	12	1
≥50 & ≥5	3	19	14	6	1
NC & ≥10	3	16	13	5	0

194

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	3	1
<20 & OR <5	+	12	24	10	1
VSBY ≥5	2	28	51	18	1
≥50 & ≥5	1	8	12	3	+
NC & ≥10	1	7	10	3	+

1473

28

INSUFFICIENT DATA

29

INSUFFICIENT DATA

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	1	6	4	3	0
<20 & OR <5	3	16	13	9	0
VSBY ≥5	8	34	35	14	3
≥50 & ≥5	4	16	19	4	1
NC & ≥10	4	14	18	4	1

115

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	3	3	1	1
<20 & OR <5	1	6	8	4	2
VSBY ≥5	7	35	30	17	7
≥50 & ≥5	6	26	23	12	5
NC & ≥10	5	23	21	10	4

336

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	+	0	0
<6 & OR <2	1	0	+	1	+
VSBY <2	0	0	0	0	+
<10 & OR <2	1	1	3	2	2
<20 & OR <5	1	4	10	5	3
VSBY ≥5	3	17	43	28	8
≥50 & ≥5	2	11	29	21	5
NC & ≥10	1	10	26	16	2

396

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	2
<6 & OR <2	0	0	2	2	4
VSBY <2	0	0	0	0	4
<10 & OR <2	0	4	11	7	7
<20 & OR <5	2	9	25	11	7
VSBY ≥5	2	18	55	9	4
≥50 & ≥5	0	7	21	4	0
NC & ≥10	0	7	20	2	0

56

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	6	0
<20 & OR <5	0	0	13	19	19
VSBY ≥5	0	13	31	38	13
≥50 & ≥5	0	13	19	13	0
NC & ≥10	0	13	19	0	0

16

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

ISIBILITY-WIND

AUGUST

3

(NOTS) 22- 33	≥34
0	0
0	0
0	0
0	0
1	0
1	0

97

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	5	7	1	0
<20 & OR <5	1	14	22	1	0
VSBY ≥5	2	39	55	2	0
≥50 & ≥5	1	19	22	1	0
NC & ≥ 10	1	18	20	1	0

1188

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	3	0	0
<20 & OR <5	0	16	11	0	0
VSBY ≥5	3	48	49	0	0
≥50 & ≥5	3	28	32	0	0
NC & ≥ 10	3	28	31	0	0

120

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	1	3	0	0
<20 & OR <5	0	2	10	+	0
VSBY ≥5	0	26	71	2	0
≥50 & ≥5	0	22	59	2	0
NC & ≥ 10	0	21	56	2	0

579

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	0	10	0	0
<20 & OR <5	0	2	25	1	0
VSBY ≥5	0	21	76	3	0
≥50 & ≥5	0	15	44	2	0
NC & ≥ 10	0	14	42	2	0

111

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	2	2	0	0
<20 & OR <5	+	9	8	+	0
VSBY ≥5	4	58	38	+	0
≥50 & ≥5	3	43	27	+	0
NC & ≥ 10	3	41	26	0	0

1266

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	+	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	3	10	+	0
<20 & OR <5	1	15	32	1	0
VSBY ≥5	1	33	64	2	0
≥50 & ≥5	+	7	13	+	0
NC & ≥ 10	+	6	12	+	0

1237

12

(NOTS) 22- 33	≥34
0	0
0	0
0	0
0	0
0	0
0	0

1360

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	8	0	0
<20 & OR <5	0	0	10	3	0
VSBY ≥5	0	20	75	5	0
≥50 & ≥5	0	20	63	3	0
NC & ≥ 10	0	20	60	3	0

40

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	9	2	0
<20 & OR <5	2	6	19	5	0
VSBY ≥5	8	21	58	12	0
≥50 & ≥5	6	12	35	5	0
NC & ≥ 10	6	12	33	4	0

191

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	7	1	0
<20 & OR <5	+	18	31	5	+
VSBY ≥5	1	34	56	8	+
≥50 & ≥5	+	4	7	1	0
NC & ≥ 10	0	3	6	1	0

1401

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	11	1	0	0
<20 & OR <5	6	43	3	1	0
VSBY ≥5	16	72	11	1	0
≥50 & ≥5	5	14	5	0	0
NC & ≥ 10	5	11	4	0	0

146

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	5	5	2	0
<20 & OR <5	2	11	18	5	0
VSBY ≥5	12	29	39	17	2
≥50 & ≥5	10	16	15	12	2
NC & ≥ 10	10	13	15	12	2

130

21

(TS) 22- 33	≥34
0	0
0	0
0	0
0	0
0	0
0	0

28

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	0	1	0
<20 & OR <5	0	11	13	7	0
VSBY ≥5	9	33	49	10	0
≥50 & ≥5	9	20	29	3	0
NC & ≥ 10	9	19	27	3	0

70

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	2	1	2	0
VSBY <2	0	1	0	0	0
<10 & OR <2	0	7	7	5	0
<20 & OR <5	2	15	22	6	0
VSBY ≥5	6	38	42	12	1
≥50 & ≥5	3	19	14	6	1
NC & ≥ 10	3	16	13	5	0

194

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	3	1
<20 & OR <5	+	12	24	10	1
VSBY ≥5	2	28	51	18	1
≥50 & ≥5	1	8	12	3	+
NC & ≥ 10	1	7	10	3	+

1473

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	+	+	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	2	2	1	+
<20 & OR <5	2	9	8	3	+
VSBY ≥5	7	38	37	16	2
≥50 & ≥5	4	23	25	11	2
NC & ≥ 10	4	21	23	10	2

2264

26

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	0	46	8	0
VSBY ≥5	0	15	62	15	0
≥50 & ≥5	0	8	23	8	0
NC & ≥ 10	0	8	23	8	0

13

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	1	0	0
<6 & OR <2	0	2	3	+	0
VSBY <2	0	2	1	+	0
<10 & OR <2	1	7	6	2	+
<20 & OR <5	1	10	14	3	+
VSBY ≥5	5	35	40	11	2
≥50 & ≥5	3	26	24	6	1
NC & ≥ 10	3	23	20	6	1

261

30

(TS) 22- 33	≥34
0	0
0	0
0	0
0	0
0	0
1	1

115

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	3	3	1	1
<20 & OR <5	1	6	8	4	2
VSBY ≥5	7	35	30	17	7
≥50 & ≥5	6	26	23	12	5
NC & ≥ 10	5	23	21	10	4

336

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	+	0	0
<6 & OR <2	1	0	+	1	+
VSBY <2	0	0	0	0	+
<10 & OR <2	1	1	3	2	2
<20 & OR <5	1	4	10	5	3
VSBY ≥5	3	17	43	28	8
≥50 & ≥5	2	11	29	21	5
NC & ≥ 10	1	10	26	16	2

396

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	2
<6 & OR <2	0	0	2	2	4
VSBY <2	0	0	0	0	4
<10 & OR <2	0	4	11	7	7
<20 & OR <5	2	9	25	11	7
VSBY ≥5	2	18	55	9	4
≥50 & ≥5	0	7	21	4	0
NC & ≥ 10	0	7	20	2	0

56

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	0	2
<6 & OR <2	0	2	0	2	2
VSBY <2	0	2	0	2	2
<10 & OR <2	0	2	0	2	2
<20 & OR <5	0	2	4	4	4
VSBY ≥5	4	19	36	23	11
≥50 & ≥5	4	13	28	21	4
NC & ≥ 10	4	13	28	21	0

47

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	5	0	0
<20 & OR <5	0	5	14	0	0
VSBY ≥5	5	24	48	19	5
≥50 & ≥5	5	19	33	19	5
NC & ≥ 10	5	19	24	19	5

21

36

INSUFFICIENT DATA

39

T INSUFFICIENT DATA

40

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	6	0
<20 & OR <5	0	0	13	19	19
VSBY ≥5	0	13	31	38	13
≥50 & ≥5	0	13	19	13	0
NC & ≥ 10	0	13	19	0	0

16

42 INSUFFICIENT DATA

43 INSUFFICIENT DATA

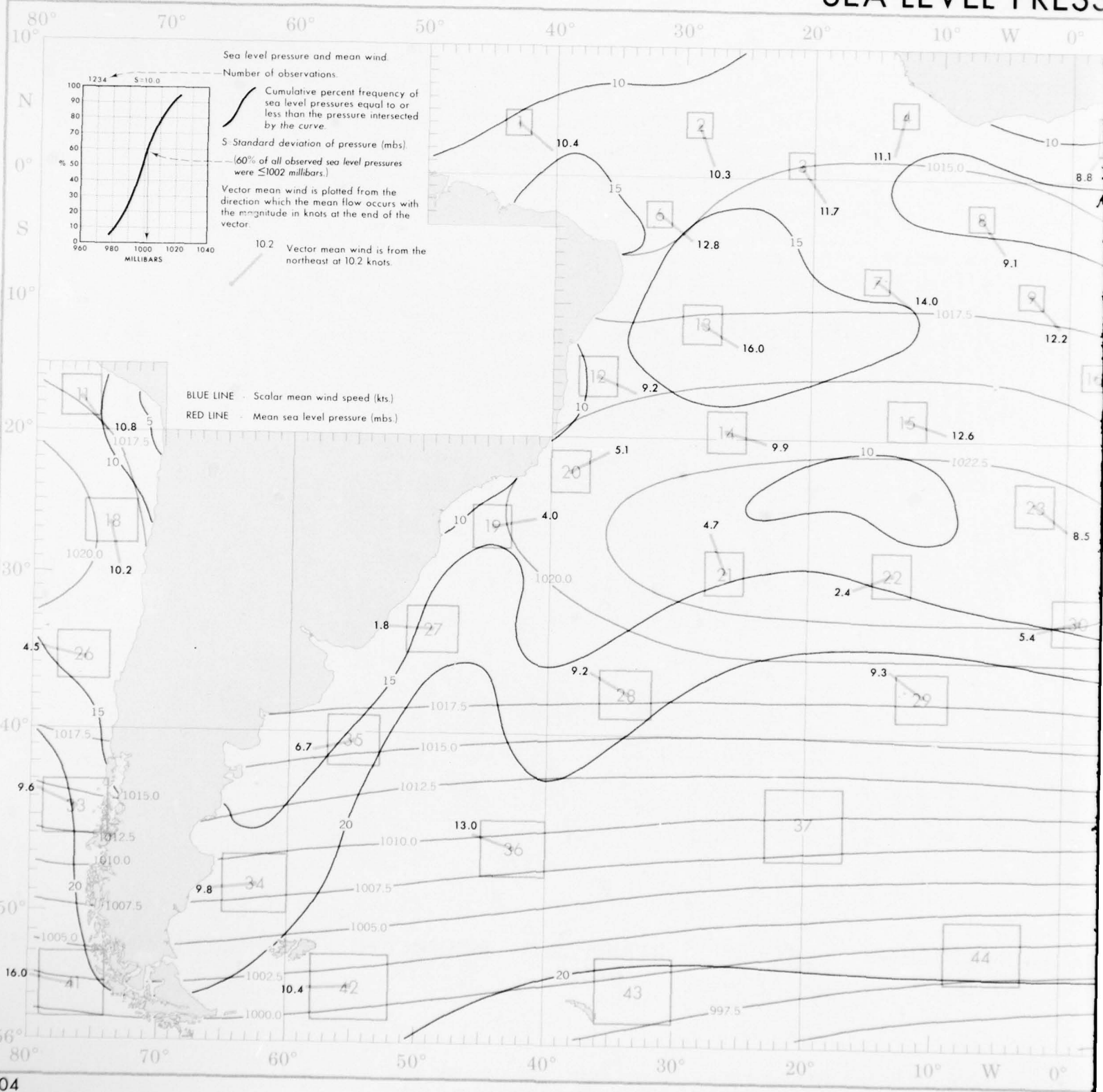
44 INSUFFICIENT DATA

45 INSUFFICIENT DATA

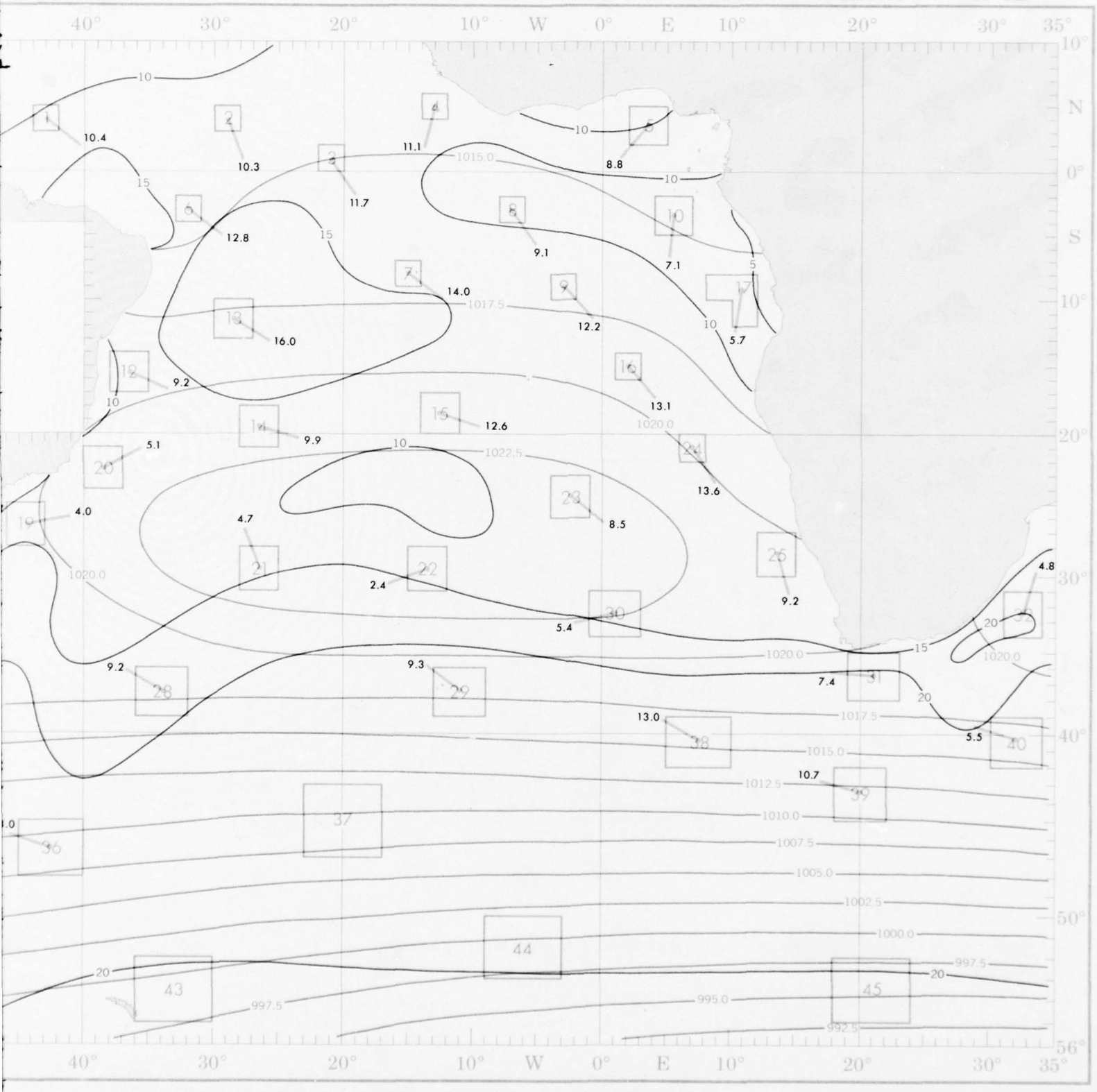
ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

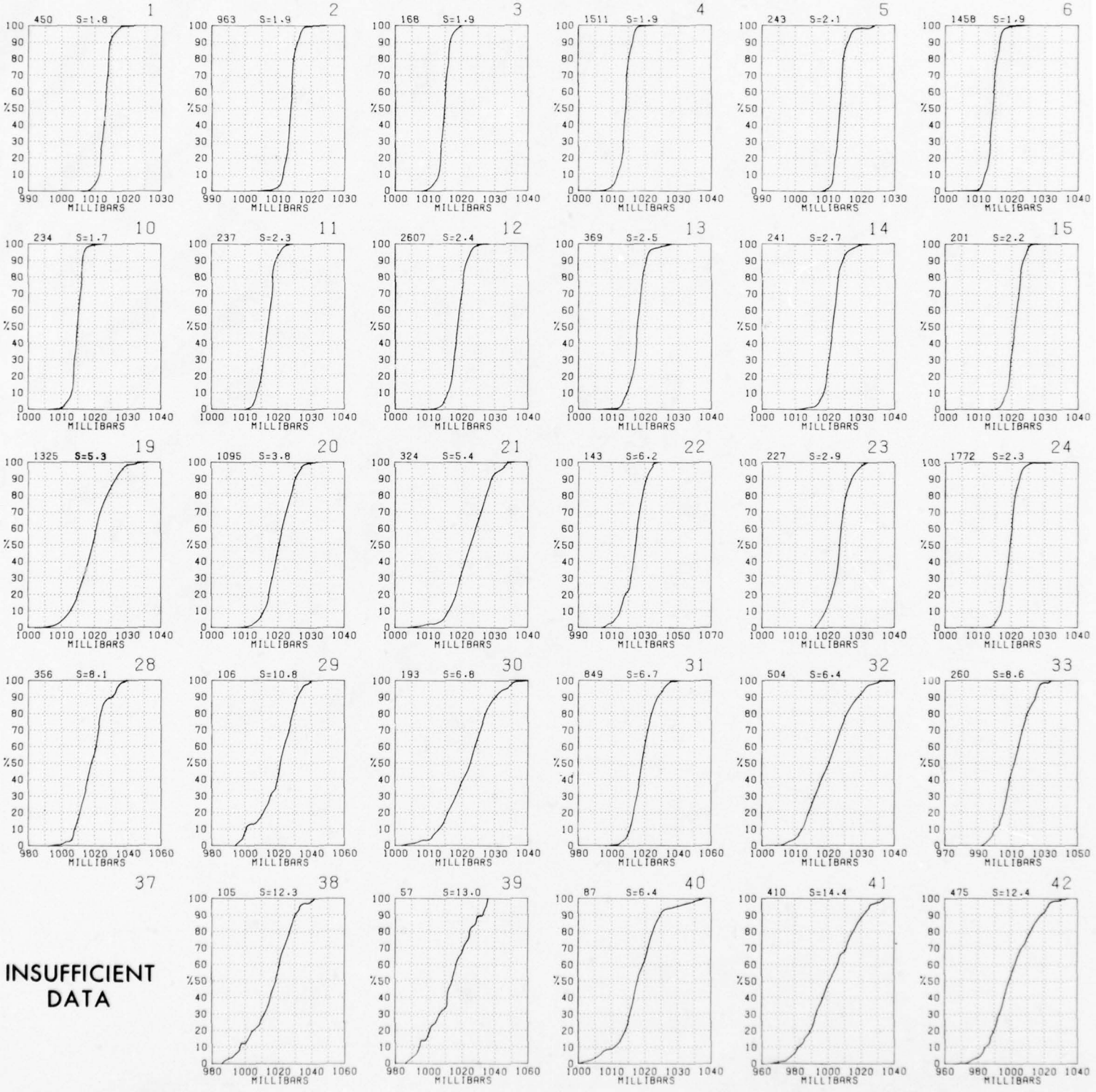
SEA LEVEL PRESS



SEA LEVEL PRESSURE AND MEAN WIND



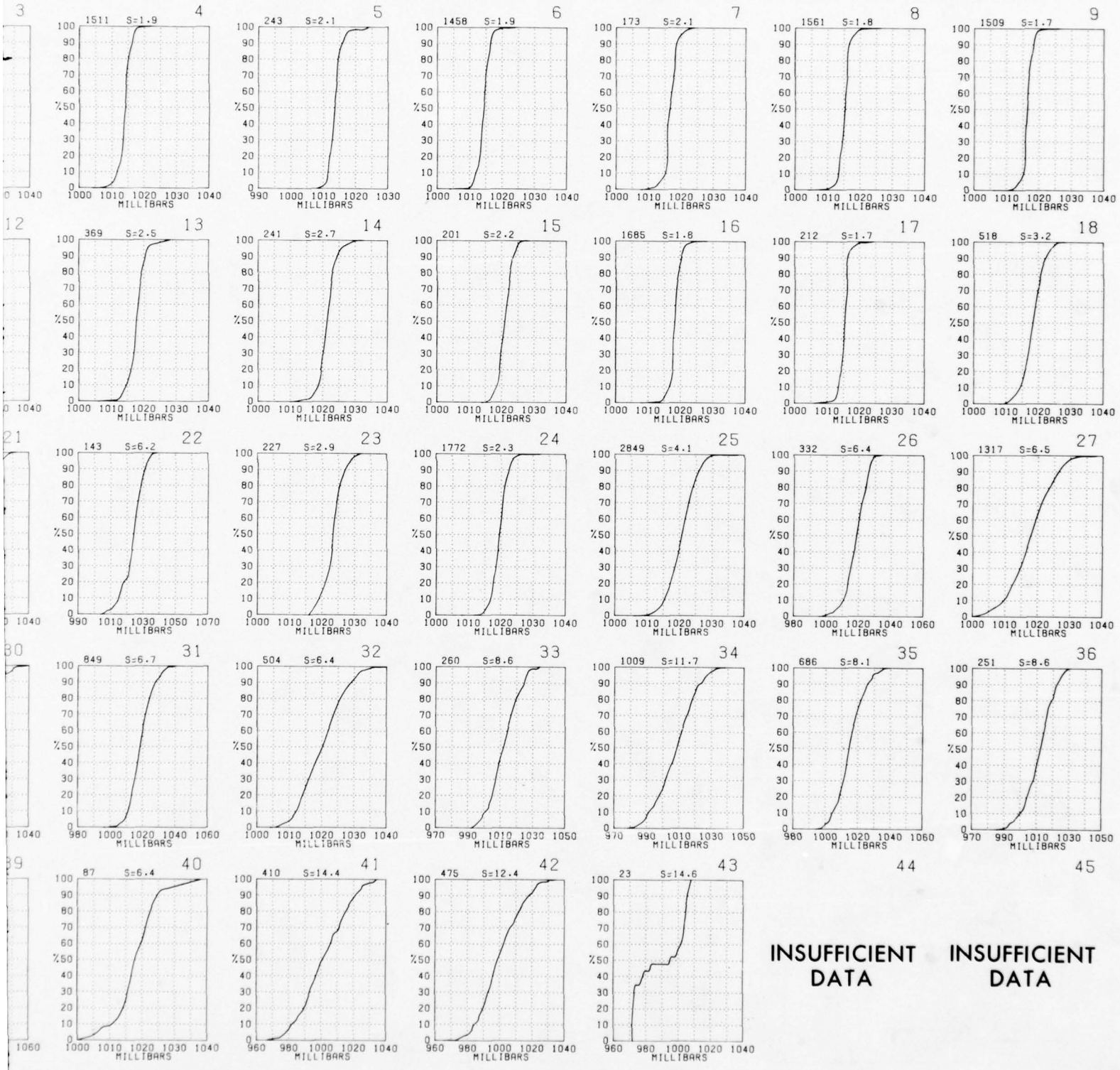
SEA LEVEL PRESSURE



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

AUGUST



44

INSUFFICIENT DATA

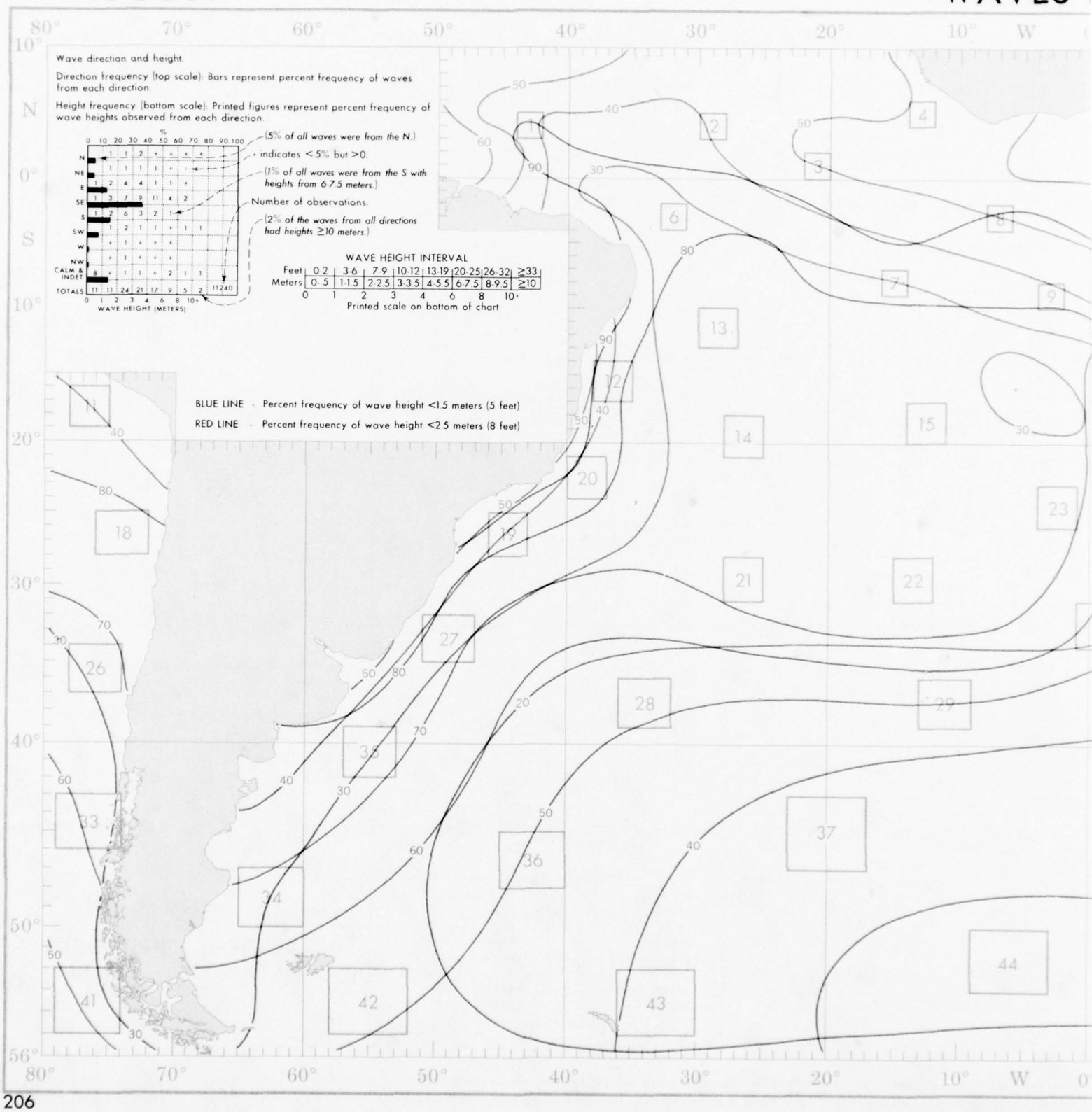
45

INSUFFICIENT DATA

esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

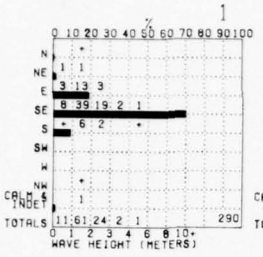
WAVES

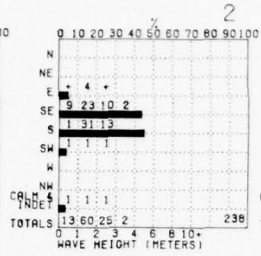


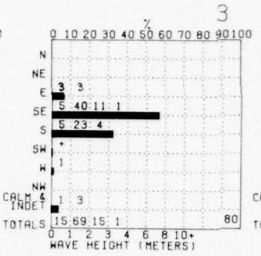
WAVES (<1.5 AND <2.5 METERS)

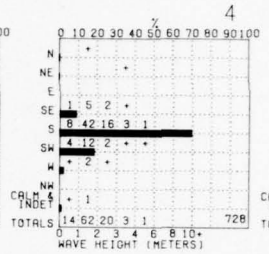


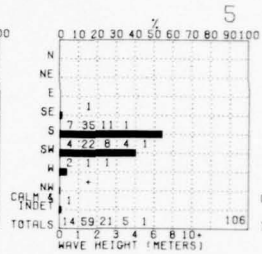
WAVE DIRECTION AND HEIGHT

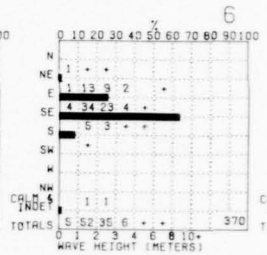


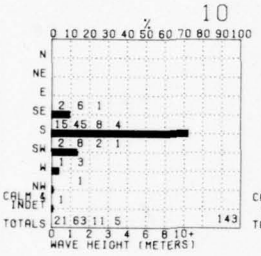


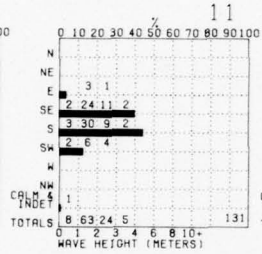


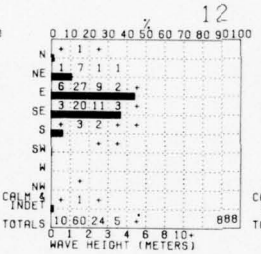


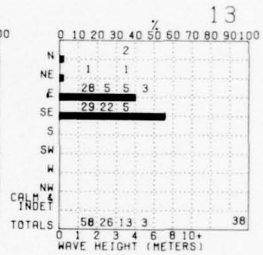






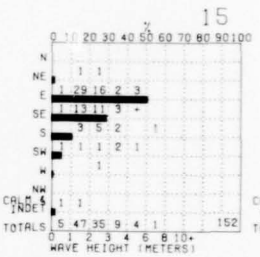


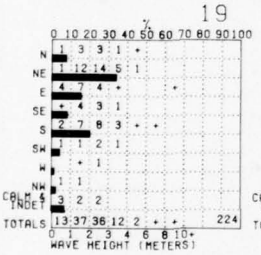


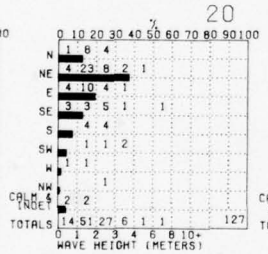


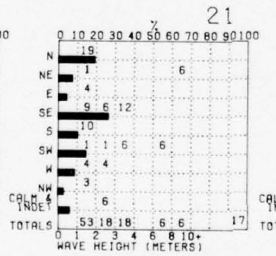
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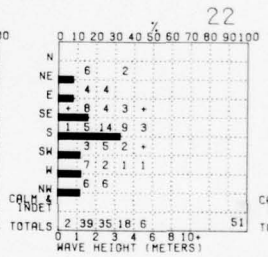
INSUFFICIENT DATA

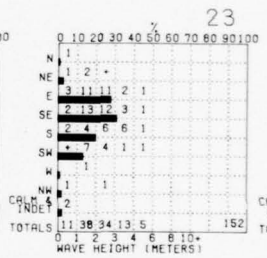


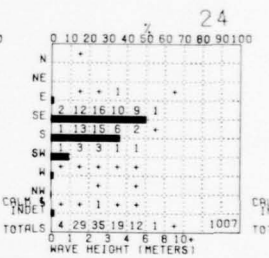










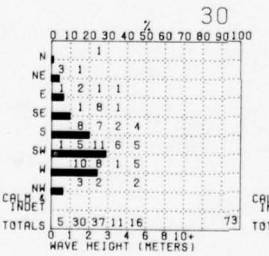


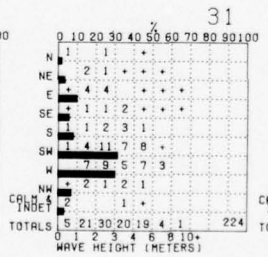
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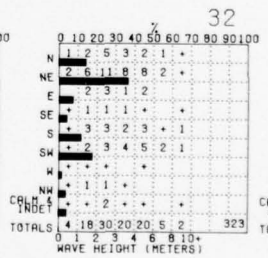
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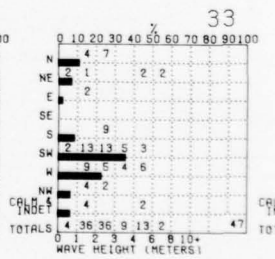
29

INSUFFICIENT DATA









37

INSUFFICIENT DATA

38

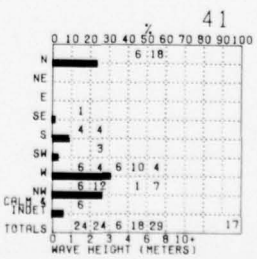
INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA



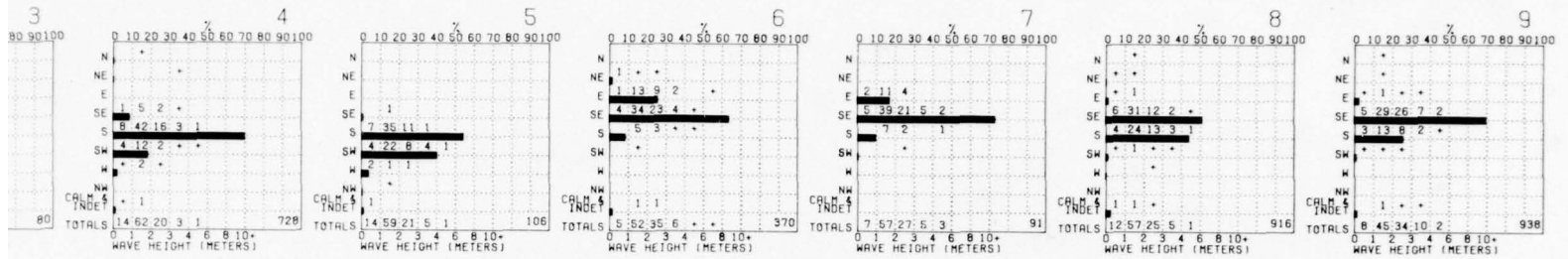
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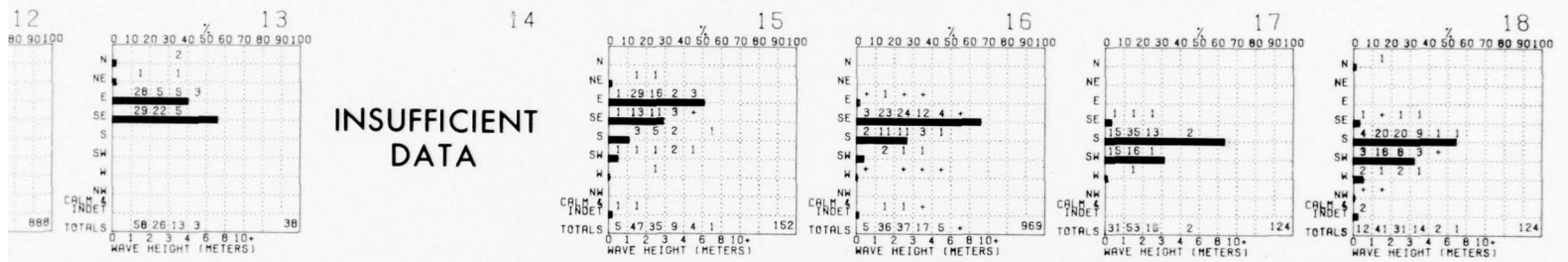
INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

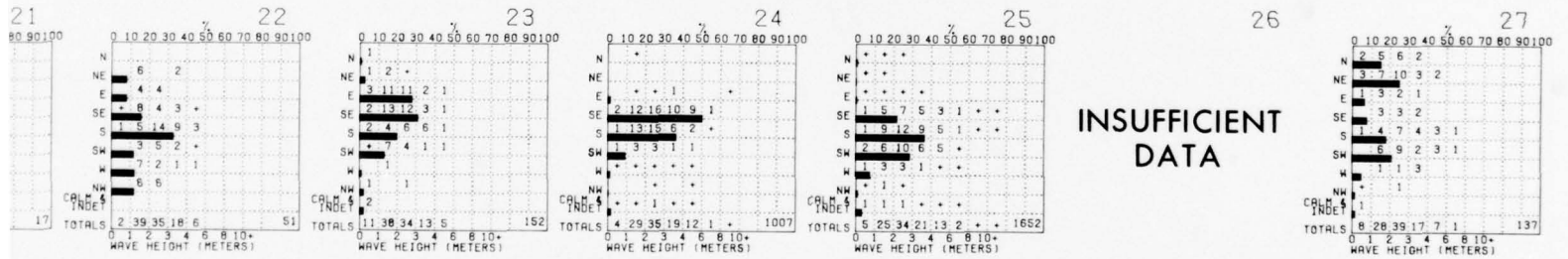
HEIGHT

AUGUST

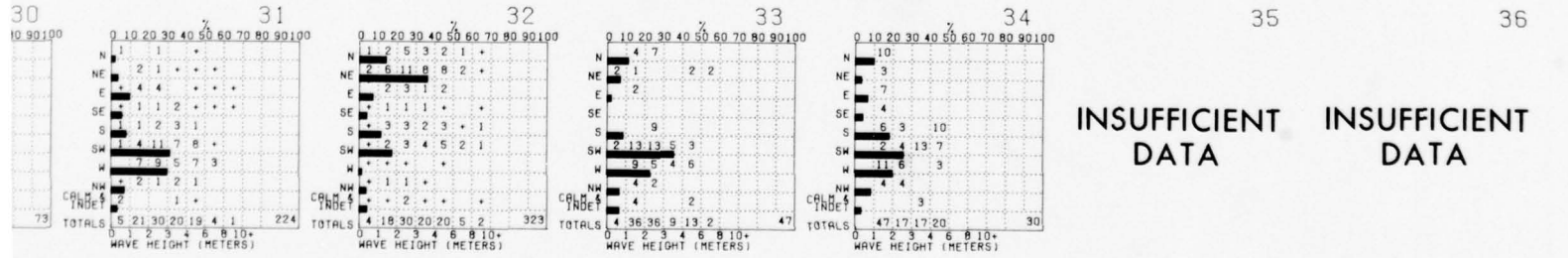




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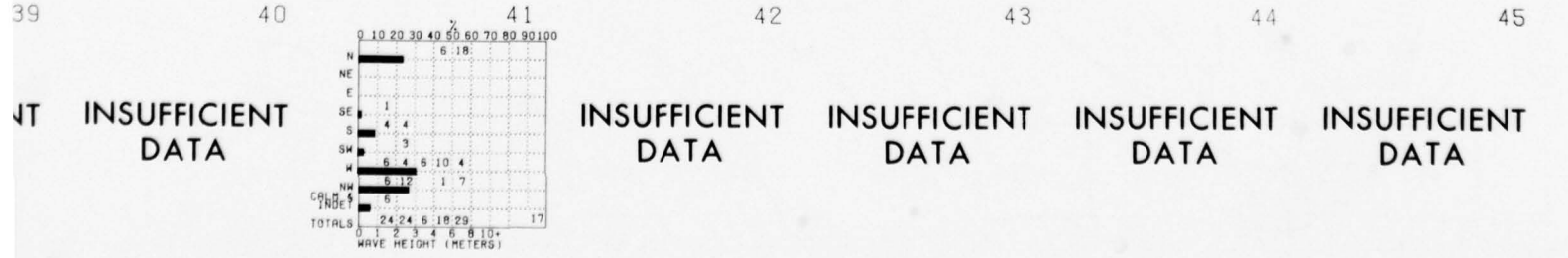
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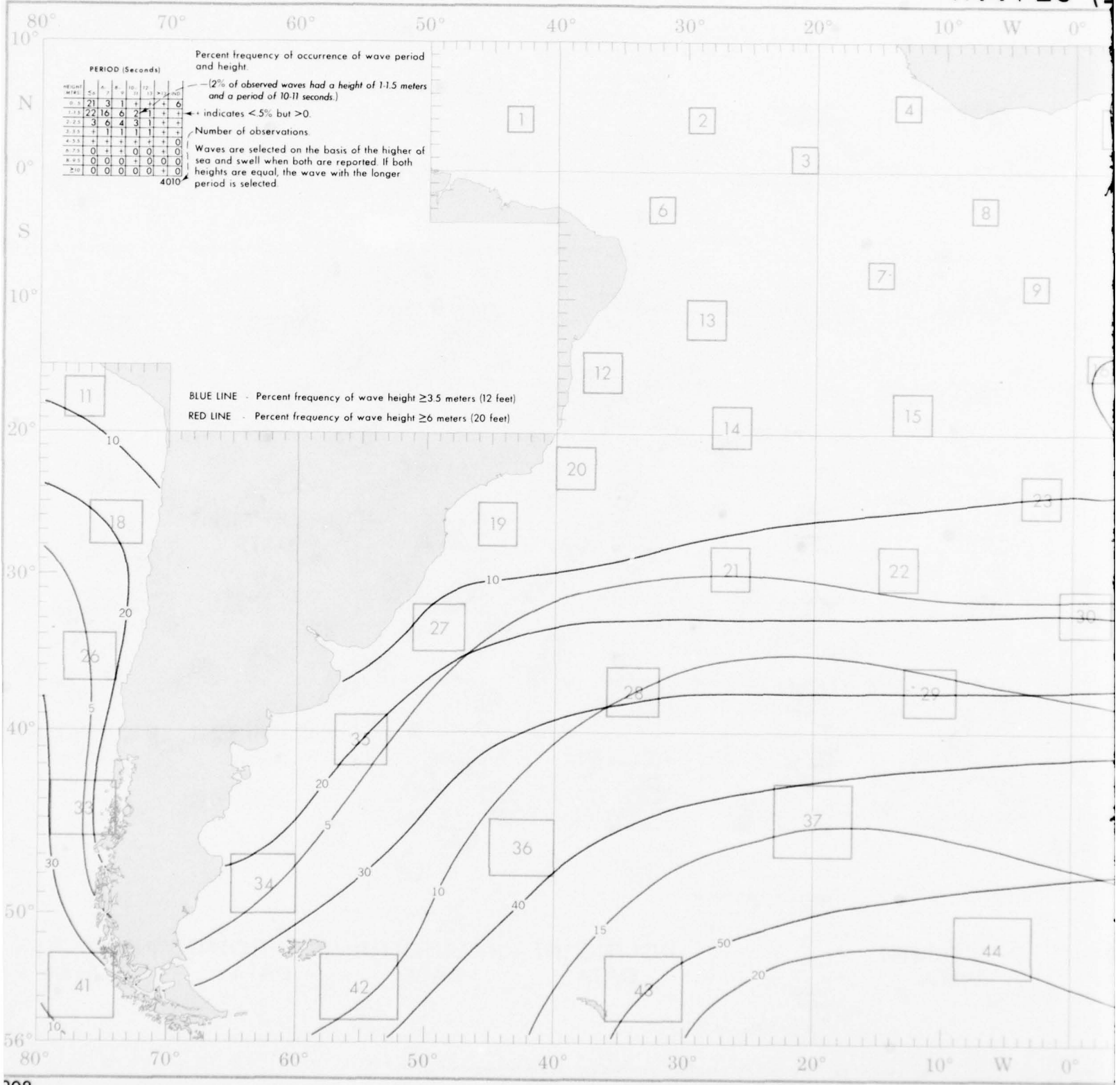
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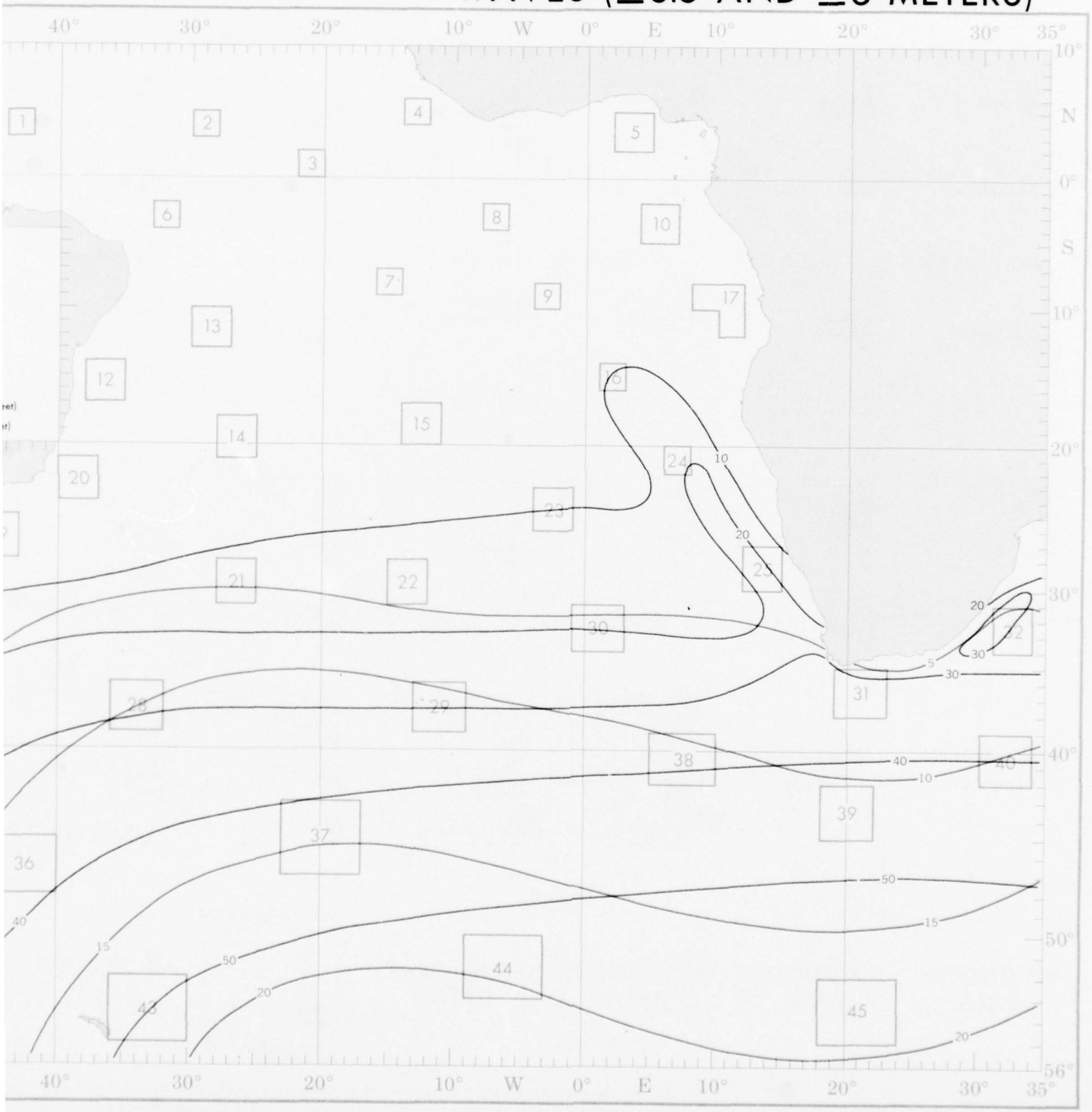
sent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AUGUST

WAVES (



WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	1	0	0	0	1
1-1.5	26	25	5	+	+	+	2
2-2.5	5	11	5	1	0	1	+
3-3.5	0	1	1	+	+	0	0
4-5.5	+	+	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

299

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	+	0	0	5
1-1.5	19	19	12	1	0	0	8
2-2.5	4	9	6	1	0	0	5
3-3.5	0	+	+	1	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

241

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	2	0	0	0	0	0
1-1.5	28	27	7	2	1	0	1
2-2.5	5	5	5	0	0	0	0
3-3.5	1	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

82

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	+	0	0	0	3
1-1.5	25	18	8	1	2	1	6
2-2.5	3	7	5	1	1	1	1
3-3.5	1	1	1	+	+	0	0
4-5.5	0	+	+	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

741

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	2	0	0	3
1-1.5	21	20	4	1	0	0	12
2-2.5	0	7	10	1	1	1	0
3-3.5	1	0	4	0	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

109

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	1	0	0	0	2
1-1.5	19	19	5	1	1	0	7
2-2.5	5	16	10	2	0	1	2
3-3.5	1	3	2	1	+	0	0
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	+	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

372

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	1	0	0	0	0	5
1-1.5	18	18	11	4	1	0	8
2-2.5	1	3	4	1	1	1	1
3-3.5	0	1	1	1	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

153

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	1	0	0	0	4
1-1.5	25	24	8	3	1	0	0
2-2.5	1	4	11	4	1	2	0
3-3.5	0	3	0	1	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

134

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	+	+	+	0	0	2
1-1.5	25	22	6	+	1	+	5
2-2.5	2	10	7	3	+	1	1
3-3.5	+	2	2	1	+	+	+
4-5.5	0	0	+	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

902

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	45	8	5	0	0	0	0
2-2.5	8	11	8	0	0	0	0
3-3.5	0	0	0	5	3	3	3
4-5.5	0	0	0	0	0	3	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

38

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	3
1-1.5	23	17	4	1	0	0	0
2-2.5	6	15	8	3	1	1	0
3-3.5	0	2	4	3	0	0	0
4-5.5	1	1	1	0	1	0	0
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

156

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	+	0	0	3
1-1.5	16	13	4	0	+	0	2
2-2.5	4	14	11	3	+	+	2
3-3.5	1	4	4	2	0	+	0
4-5.5	+	0	1	+	0	0	+
6-7.5	0	0	0	0	0	+	0
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	0	0	0	0

228

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	1	0	0	2
[illegible]	26	14	3	0	2	0	5
2-2.5	2	12	9	2	0	1	0
3-3.5	0	2	5	0	0	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	1	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

129

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	12	18	12	0	0	0	12
2-2.5	0	12	0	0	0	0	6
3-3.5	12	0	6	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	6	0	0	0	0
8-9.5	0	0	0	0	6	0	0
≥10	0	0	0	0	0	0	0

17

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	0
1-1.5	12	22	2	0	0	0	4
2-2.5	6	4	10	14	0	0	2
3-3.5	0	2	6	6	4	0	0
4-5.5	0	0	0	4	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

51

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	0	1	0	0	1
1-1.5	17	14	3	1	0	0	1
2-2.5	3	14	5	8	3	1	0
3-3.5	2	1	5	1	2	1	0
4-5.5	1	1	3	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

155

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	+	0	0	0	1
1-1.5	10	11	4	1	1	+	3
2-2.5	6	9	10	5	1	1	2
3-3.5	2	3	6	3	2	1	2
4-5.5	1	2	4	2	1	+	+
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	0	0	0	0

1018

28

INSUFFICIENT DATA

29

INSUFFICIENT DATA

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	0	0	0	0	1
1-1.5	11	4	12	1	0	0	1
2-2.5	3	10	19	5	0	0	0
3-3.5	0	0	8	1	0	0	1
4-5.5	0	4	5	1	4	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

73

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	0	0	0	0	3
1-1.5	7	5	4	1	+	1	3
2-2.5	4	8	9	5	2	1	+
3-3.5	2	2	9	4	1	1	+
4-5.5	+	4	6	4	2	1	1
6-7.5	0	0	1	1	1	1	0
8-9.5	0	+	0	0	0	+	0
≥10	0	0	0	0	0	0	0

227

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	+	0	0	0	1
1-1.5	7	4	2	1	0	+	3
2-2.5	6	9	7	2	1	2	4
3-3.5	2	5	7	3	2	+	1
4-5.5	1	3	9	4	3	0	1
6-7.5	0	0	3	1	0	1	0
8-9.5	0	0	+	1	1	1	+
≥10	0	0	0	0	0	0	0

323

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	0
1-1.5	17	11	4	0	0	0	4
2-2.5	11	11	11	2	0	0	2
3-3.5	0	0	4	0	0	0	4
4-5.5	2	0	0	4	4	0	2
6-7.5	0	2	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

47

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	18	0	0	0	0	0	6
2-2.5	12	0	0	12	0	0	0
3-3.5	0	0	6	0	0	0	0
4-5.5	0	0	12	6	0	0	0
6-7.5	0	0	0	29	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

42

INSUFFICIENT DATA

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Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

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4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	1	+	0	0	0	3
1-1.5	25	18	8	1	2	1	6
2-2.5	3	7	5	1	1	1	1
3-3.5	1	1	1	+	+	0	0
4-5.5	0	+	+	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

741

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	2	0	0	3
1-1.5	21	20	4	1	0	0	12
2-2.5	0	7	10	1	1	1	0
3-3.5	1	0	4	0	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

109

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	1	0	0	0	2
1-1.5	19	19	5	1	1	0	7
2-2.5	5	15	10	2	0	1	2
3-3.5	1	3	2	1	+	0	0
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	+	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

372

7

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	2
1-1.5	35	12	9	0	0	0	0
2-2.5	10	10	3	1	0	2	1
3-3.5	0	2	2	1	0	0	0
4-5.5	0	1	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

93

8

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	2	1	+	0	0	3
1-1.5	21	17	7	2	3	1	6
2-2.5	4	7	8	2	1	+	2
3-3.5	1	1	2	+	+	+	+
4-5.5	0	+	1	+	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

932

9

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	+	0	0	0	2
1-1.5	17	13	6	3	1	1	4
2-2.5	7	12	8	2	1	1	2
3-3.5	1	4	3	1	+	+	+
4-5.5	0	1	1	+	+	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

945

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	45	8	5	0	0	0	0
2-2.5	8	11	8	0	0	0	0
3-3.5	0	0	0	5	3	3	3
4-5.5	0	0	0	0	0	3	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

38

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	3
1-1.5	23	17	4	1	0	0	0
2-2.5	6	15	8	3	1	1	0
3-3.5	0	2	4	3	0	0	0
4-5.5	1	1	1	0	1	0	0
6-7.5	0	0	0	1	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

156

16

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	1
1-1.5	13	12	5	2	1	+	3
2-2.5	6	9	9	6	1	1	3
3-3.5	2	5	4	2	1	1	2
4-5.5	+	1	2	1	+	+	+
6-7.5	0	+	0	0	+	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

975

17

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	5	3	1	0	0	2
1-1.5	13	10	12	7	3	1	5
2-2.5	2	2	2	3	1	0	4
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

131

18

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	2	2	0	0	0	2
1-1.5	14	17	8	1	2	0	0
2-2.5	5	8	10	6	0	2	0
3-3.5	0	3	7	2	2	0	0
4-5.5	0	0	1	0	0	1	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

125

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	0
1-1.5	12	22	2	0	0	0	4
2-2.5	6	4	10	14	0	0	2
3-3.5	0	2	6	6	4	0	0
4-5.5	0	0	0	4	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

51

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	0	1	0	0	3
1-1.5	17	14	3	1	0	0	1
2-2.5	3	14	5	8	3	1	0
3-3.5	2	1	5	1	2	1	0
4-5.5	1	1	3	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

155

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	+	0	0	0	1
1-1.5	10	11	4	1	1	+	3
2-2.5	6	9	10	5	1	1	2
3-3.5	2	3	5	3	2	1	2
4-5.5	1	2	4	2	1	+	+
6-7.5	0	+	+	+	0	+	0
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	0	0	0	0

1018

25

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	+	+	0	0	2
1-1.5	9	8	3	1	1	+	3
2-2.5	4	8	9	5	2	1	4
3-3.5	1	6	6	4	2	1	1
4-5.5	+	2	5	3	2	1	1
6-7.5	0	+	+	+	+	+	+
8-9.5	0	+	+	0	0	0	+
≥10	0	0	+	0	0	0	0

1673

26

INSUFFICIENT DATA

27

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	3
1-1.5	6	11	7	1	1	0	0
2-2.5	5	13	12	4	0	0	1
3-3.5	1	3	4	3	2	0	2
4-5.5	0	3	1	3	1	0	0
6-7.5	0	1	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	0	0	0	0	3
1-1.5	7	5	4	1	+	1	3
2-2.5	4	8	9	5	2	1	+
3-3.5	2	2	9	4	1	1	+
4-5.5	+	4	6	4	2	1	1
6-7.5	0	0	1	1	1	1	0
8-9.5	0	+	0	0	0	+	0
≥10	0	0	0	0	0	0	0

227

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	+	0	0	0	1
1-1.5	7	4	2	1	0	+	3
2-2.5	6	9	7	2	1	2	4
3-3.5	2	5	7	3	2	+	1
4-5.5	1	3	9	4	3	0	1
6-7.5	0	0	3	1	0	1	0
8-9.5	0	0	+	1	1	1	+
≥10	0	0	0	0	0	0	0

323

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	0
1-1.5	17	11	4	0	0	0	4
2-2.5	11	11	11	2	0	0	2
3-3.5	0	0	4	0	0	0	4
4-5.5	2	0	0	4	4	0	2
6-7.5	0	2	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

47

34

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	0
1-1.5	35	10	0	0	0	0	0
2-2.5	0	6	10	0	0	0	0
3-3.5	0	3	10	0	0	0	3
4-5.5	0	0	6	13	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

35

INSUFFICIENT DATA

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	18	0	0	0	0	0	6
2-2.5	12	0	0	12	0	0	0
3-3.5	0	0	6	0	0	0	0
4-5.5	0	0	12	6	0	0	0
6-7.5	0	0	0	29	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

17

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

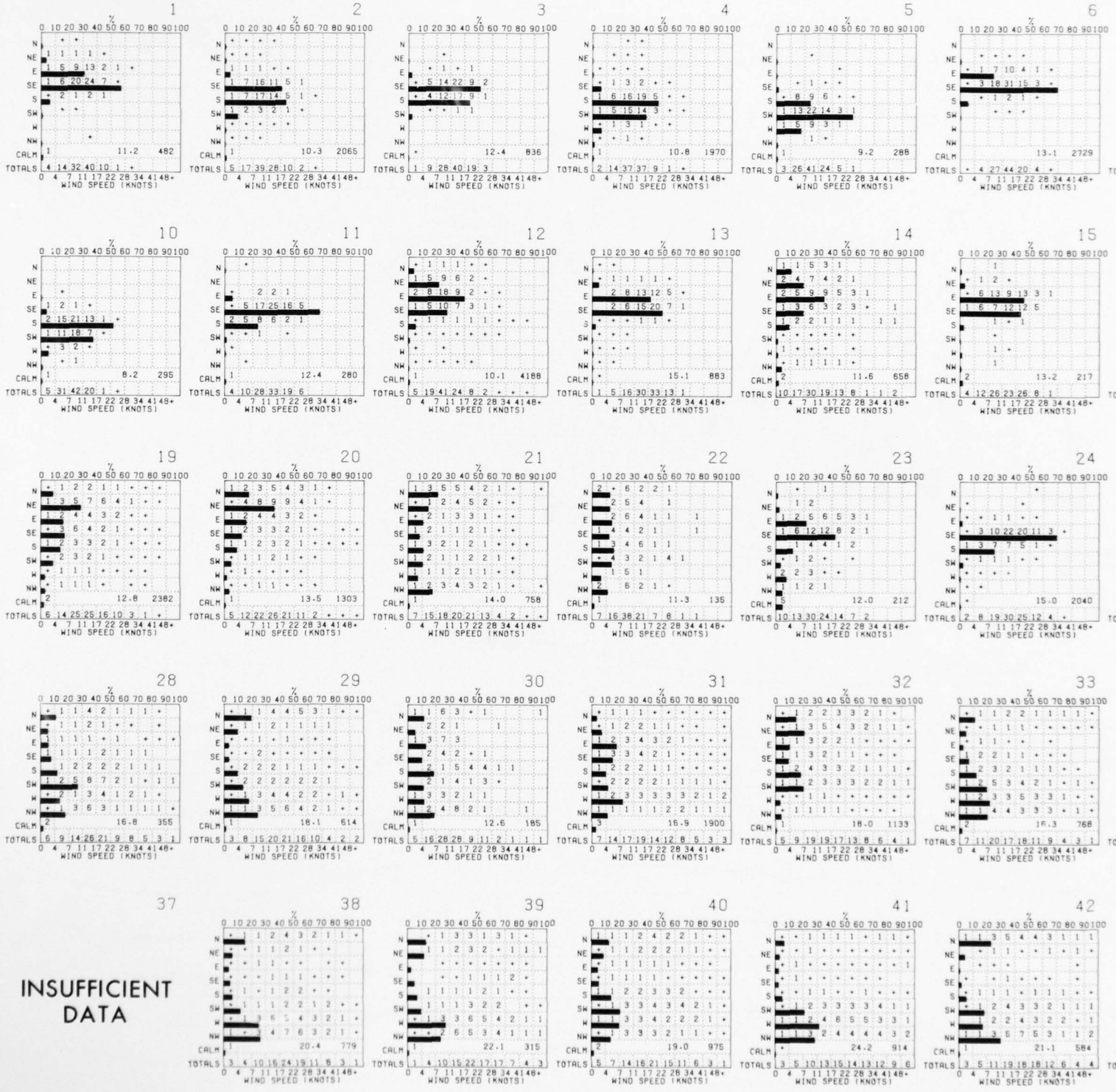
SEPTEMBER


Direction frequency (top scale). Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale). Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates < 5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

SURFACE WINDS



WIND DIRECTION AND SPEED

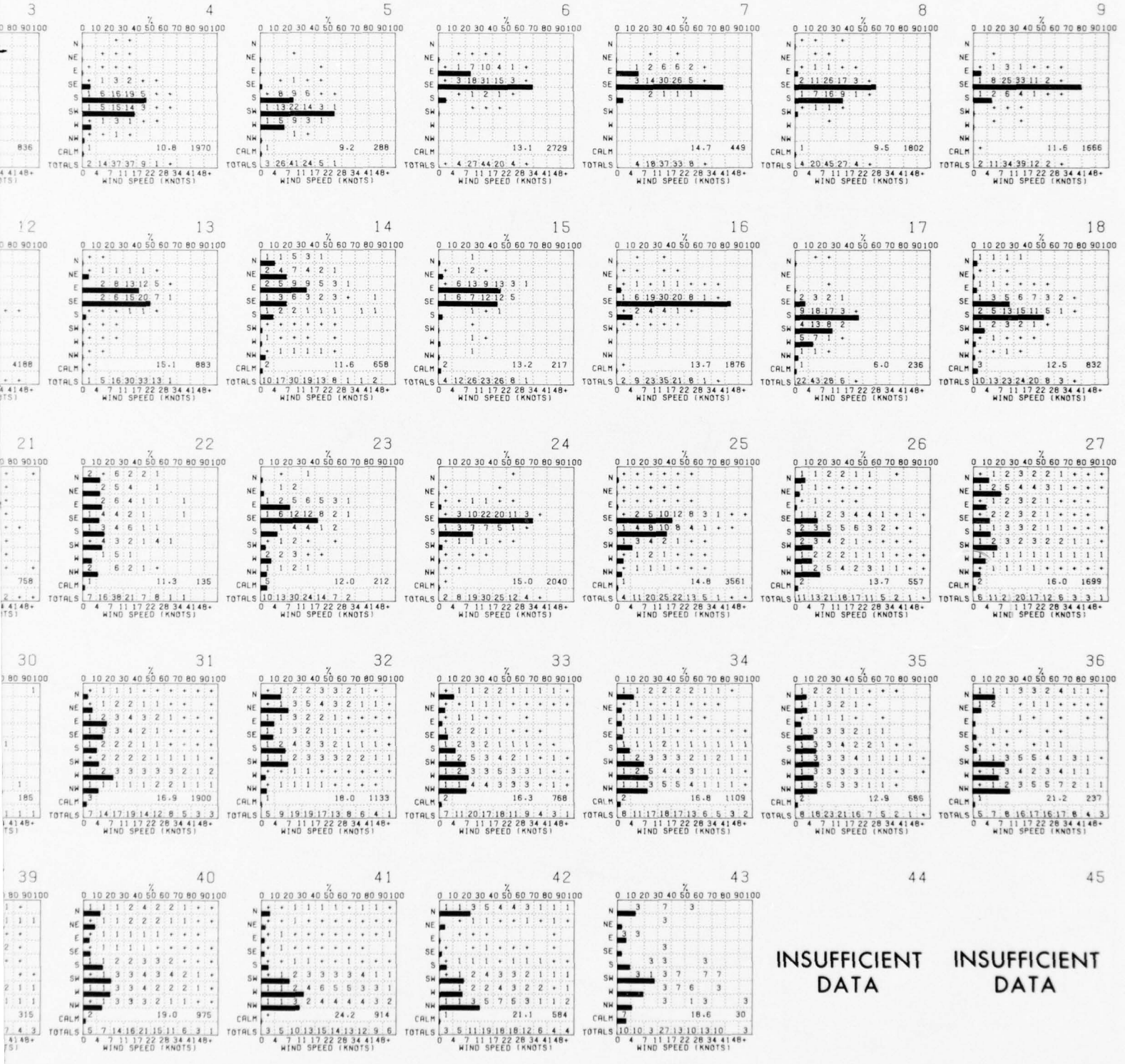


INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

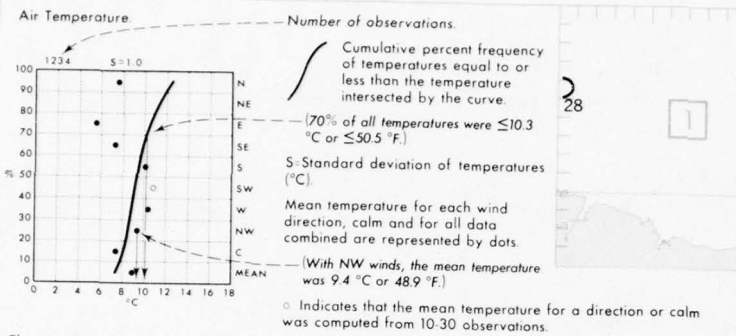
SPEED

SEPTEMBER



esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



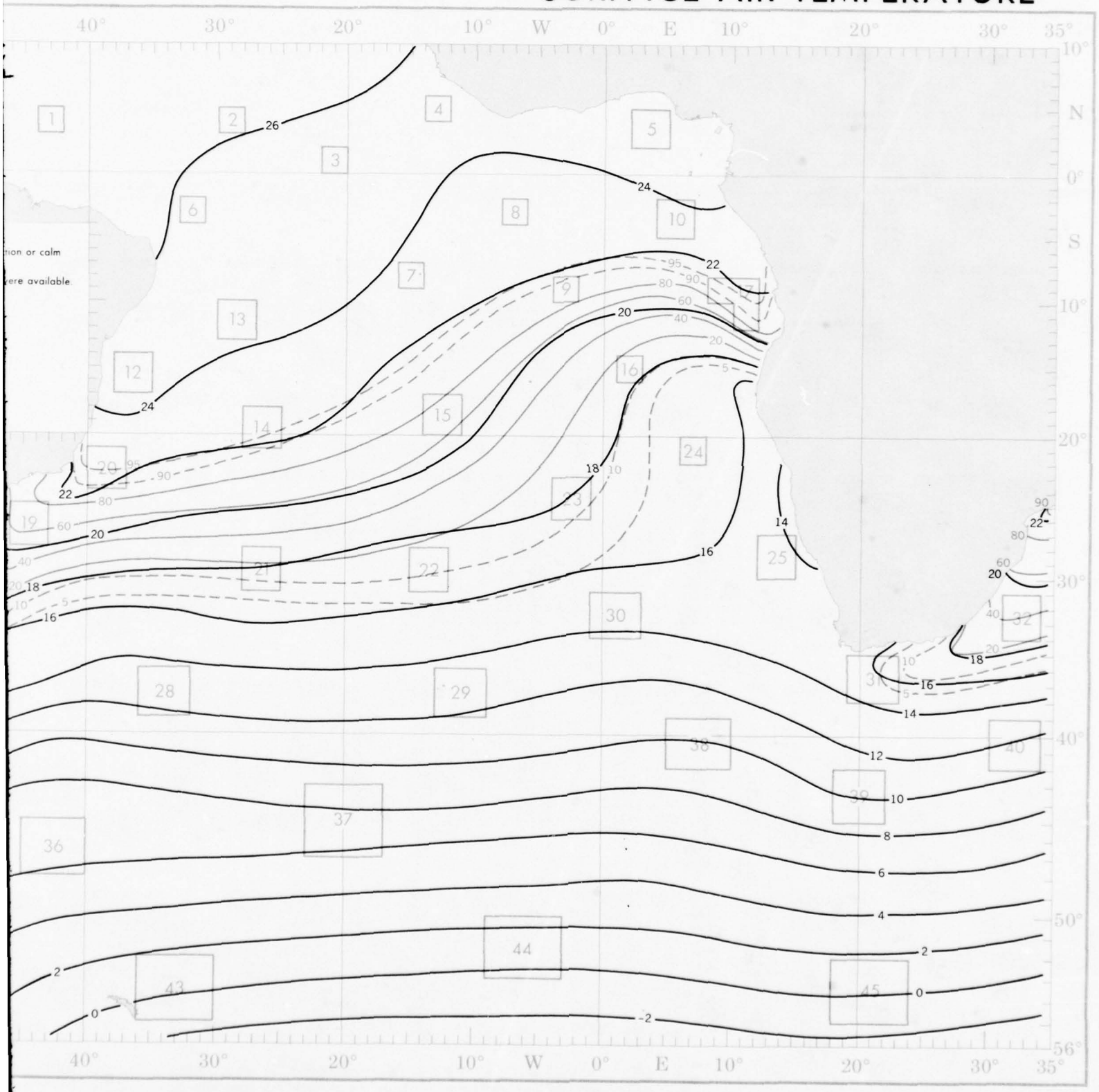
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.

The mean temperature is omitted when less than 10 observations for a direction or calm were available.

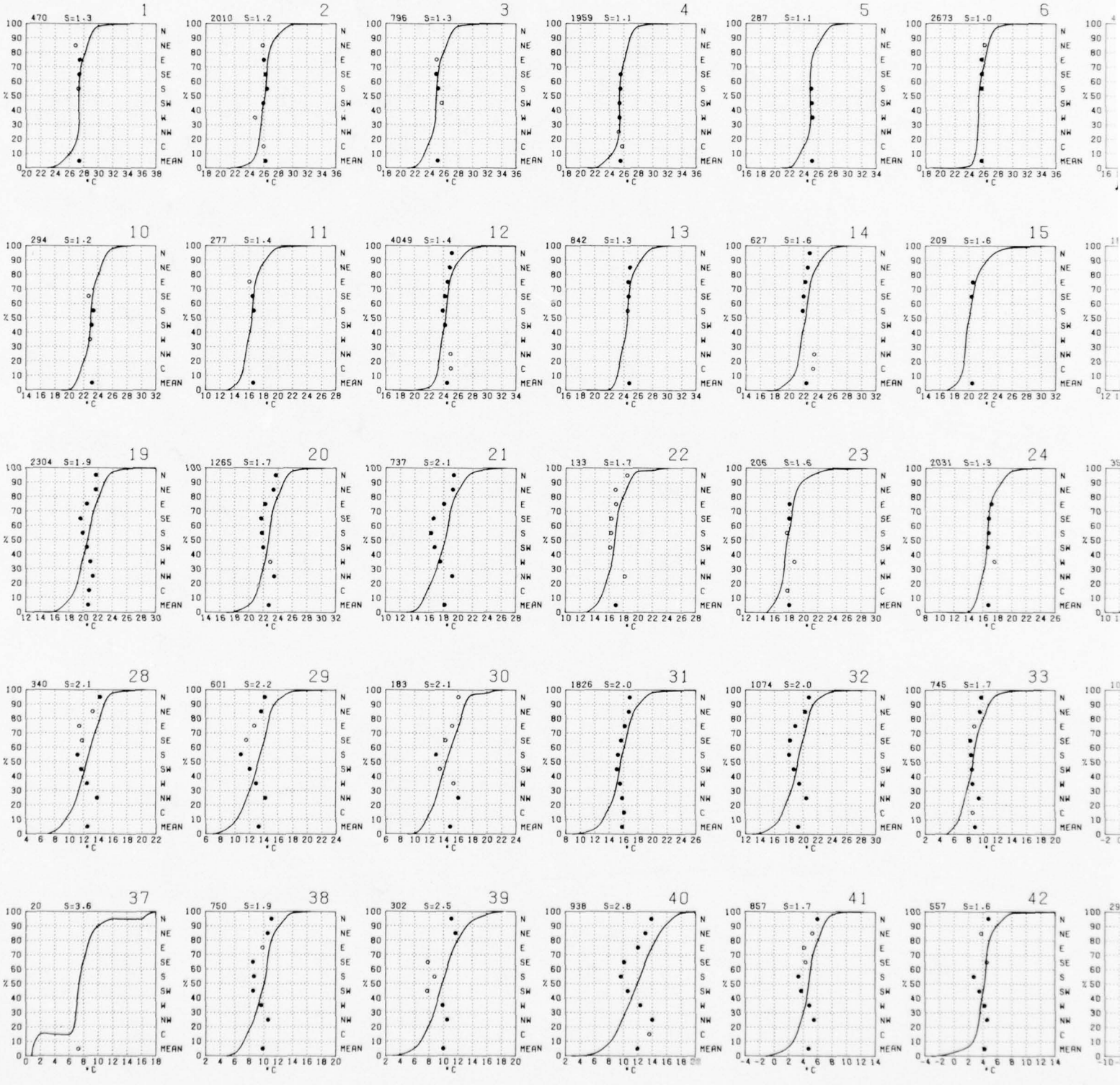
BLACK LINE - Mean air temperature (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE

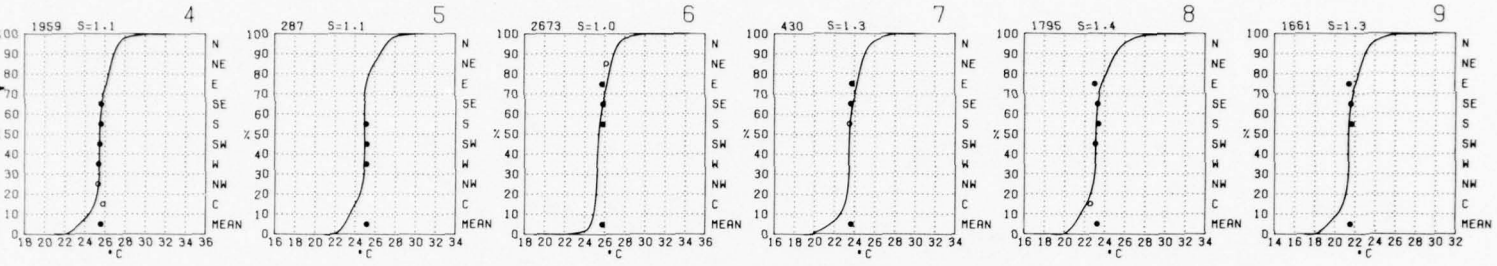


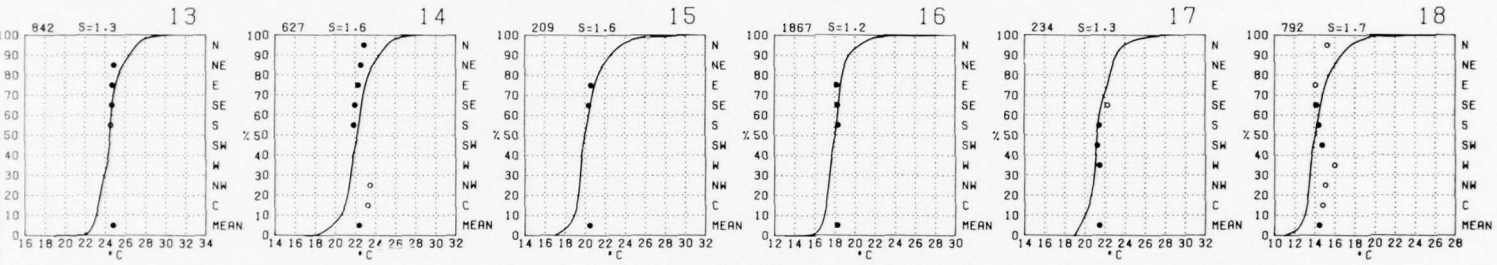
SURFACE AIR TEMPERATURE

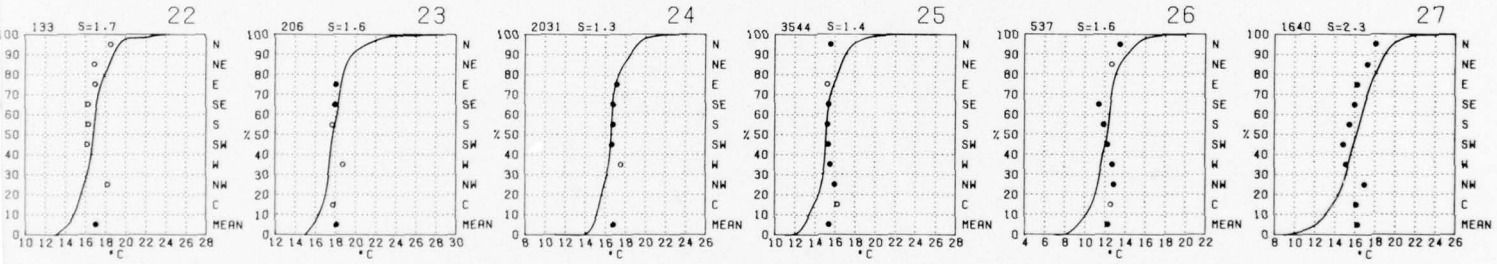


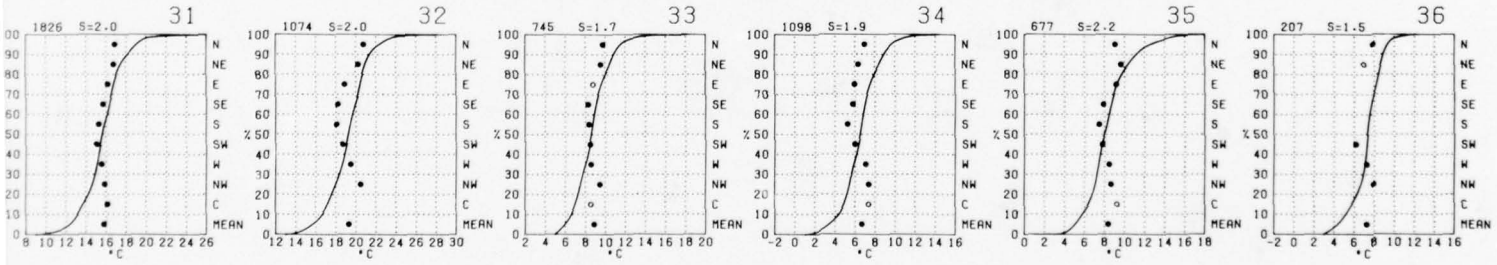
Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

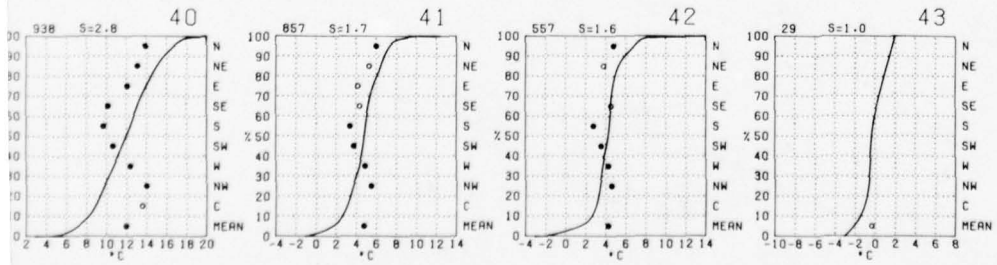
SEPTEMBER











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INSUFFICIENT DATA

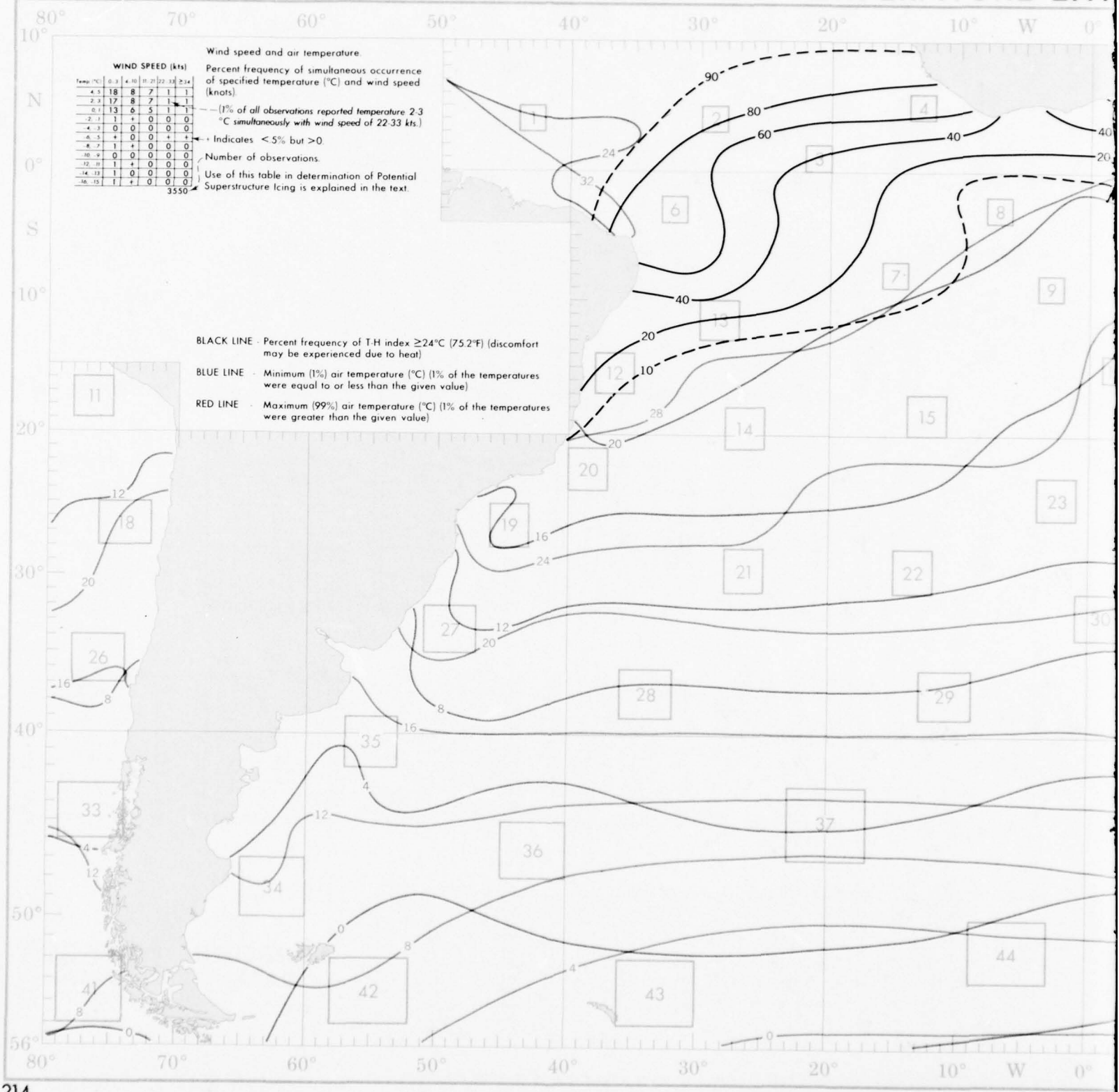
45

INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER

TEMPERATURE EXT



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	0	2	2	0	0
28.29	1	19	20	1	0
26.27	2	23	26	0	0
24.25	0	1	1	0	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

470

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	0	0	0
30.31	+	1	1	0	0
28.29	1	8	5	+	0
26.27	3	36	25	1	0
24.25	1	10	7	+	0
22.23	+	1	+	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

2016

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	+	0	0	0
28.29	0	2	2	+	0
26.27	+	12	18	1	0
24.25	1	20	36	1	0
22.23	0	2	3	+	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

796

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	0	0
28.29	+	3	1	+	0
26.27	1	25	23	+	0
24.25	1	21	20	1	0
22.23	+	1	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1980

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	0	2	1	0	0
26.27	1	23	6	0	0
24.25	2	40	22	1	0
22.23	1	2	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

288

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	+	+	0	0
28.29	0	2	3	+	0
26.27	+	17	37	2	0
24.25	+	13	23	2	0
22.23	0	+	+	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2673

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	+	4	1	0	0
24.25	2	21	10	0	0
22.23	2	45	10	+	0
20.21	1	3	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

295

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	0	+	0	0
20.21	0	1	1	0	0
18.19	+	7	8	1	0
16.17	3	23	35	4	0
14.15	0	6	8	1	0
12.13	0	1	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

277

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	+	0	0	0
28.29	+	2	1	0	0
26.27	1	11	6	+	0
24.25	3	36	19	2	+
22.23	1	10	7	1	0
20.21	+	+	+	+	+
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

4052

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	1	3	+	0
26.27	+	4	12	2	0
24.25	1	13	42	9	0
22.23	+	3	6	3	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

842

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	+	2	1	0	0
24.25	3	10	5	1	0
22.23	4	25	17	5	0
20.21	2	9	9	2	2
18.19	0	1	1	0	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

627

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	0	1	0	0	0
24.25	0	1	2	0	0
22.23	0	8	8	0	0
20.21	3	20	25	6	0
18.19	+	9	12	4	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

211

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	+	0
26.27	+	+	+	+	0
24.25	+	2	2	1	0
22.23	1	12	13	4	+
20.21	3	16	15	5	+
18.19	1	7	9	3	+
16.17	+	2	1	+	+
14.15	0	+	+	+	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2305

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	0	+	+	+	0
26.27	+	2	2	1	0
24.25	2	10	14	4	+
22.23	2	16	21	6	+
20.21	1	6	9	3	+
18.19	+	+	1	0	+
16.17	0	0	0	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1266

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	1	+	0
22.23	+	1	1	+	0
20.21	1	8	11	3	+
18.19	3	11	17	5	1
16.17	2	9	7	5	+
14.15	+	3	5	3	+
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

737

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	1	0	0
20.21	0	2	2	0	0
18.19	2	20	9	1	0
16.17	6	26	12	2	1
14.15	0	4	5	6	1
12.13	0	2	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

133

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	0	0	0
24.25	0	0	0	0	0
22.23	+	+	2	0	0
20.21	+	6	3	0	0
18.19	6	22	22	4	0
16.17	3	13	9	5	0
14.15	0	1	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

209

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	+	0
20.21	+	1	2	+	0
18.19	+	7	12	3	0
16.17	1	17	34	10	+
14.15	+	3	6	2	+
12.13	0	+	0	0	0
10.11	0	0	0	+	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

2033

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	0	1	0	0	0
16.17	1	1	2	1	1
14.15	1	6	14	4	2
12.13	2	8	18	4	3
10.11	1	7	9	4	2
8.9	0	1	4	2	0
6.7	0	0	+	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

340

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	+	+	0	0	0
18.19	0	0	1	+	0
16.17	+	1	7	3	1
14.15	1	7	13	11	2
12.13	1	9	13	7	2
10.11	1	5	5	3	1
8.9	0	1	2	2	2
6.7	0	0	0	0	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

601

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	2	1	0	0
18.19	0	1	4	1	0
16.17	2	18	10	1	1
14.15	2	14	13	7	0
12.13	1	9	7	2	1
10.11	0	0	1	2	1
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

184

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	+	+	0
22.23	+	+	+	+	+
20.21	+	1	1	+	+
18.19	2	6	5	2	1
16.17	3	13	13	7	4
14.15	2	9	10	7	3
12.13	1	2	3	2	2
10.11	+	1	+	+	+
8.9	0	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1834

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	0	+	0
24.25	0	+	1	+	+
22.23	1	3	5	3	1
20.21	2	9	14	7	3
18.19	2	11	12	6	4
16.17	1	4	4	3	2
14.15	+	1	1	1	1
12.13	0	0	0	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1086

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	0
14.15	+	1	1	+	0
12.13	+	1	1	1	+
10.11	2	9	9	9	3
8.9	2	14	17	8	2
6.7	2	5	6	3	1
4.5	0	+	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

745

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	5	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	5	0
10.11	0	0	0	0	0
8.9	5	15	5	5	0
6.7	0	15	5	15	10
4.5	0	0	0	0	0
2.3	0	0	5	0	0
0.1	0	10	0	0	0
-2.-1	0	0	0	0	0

20

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	0	0	0
14.15	+	+	1	+	0
12.13	1	3	9	6	2
10.11	1	7	17	13	4
8.9	1	4	9	8	3
6.7	+	1	3	4	2
4.5	0	0	+	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

750

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	0	+	1
16.17	0	0	0	+	1
14.15	0	2	2	2	+
12.13	+	3	8	8	1
10.11	1	5	13	9	5
8.9	+	3	12	9	3
6.7	0	1	2	5	2
4.5	0	+	+	1	1
2.3	0	+	0	0	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

302

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	1	+	+
16.17	1	2	3	3	1
14.15	1	4	8	4	2
12.13	1	7	11	7	2
10.11	1	5	9	5	2
8.9	1	2	4	4	2
6.7	+	+	1	2	1
4.5	0	0	+	+	1
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

938

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	+	0	+	0
8.9	+	+	2	2	1
6.7	1	4	9	7	9
4.5	1	7	12	14	10
2.3	1	4	5	3	4
0.1	+	+	1	1	1
-2.-1	0	0	0	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

857

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	+	0
10.11	0	0	0	+	0
8.9	1	+	1	+	+
6.7	1	3	5	5	1
4.5	1	8	25	17	7
2.3	+	4	7	4	4
0.1	0	+	+	1	1
-2.-1	0	0	1	+	1
-4.-3	0	0	0	0	+
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

557

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

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4

WIND SPEED (KTS)

MP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	0	0
28.29	+	3	1	+	0
26.27	1	25	23	+	0
24.25	1	21	20	1	0
22.23	+	1	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1980

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	0	2	1	0	0
26.27	1	23	6	0	0
24.25	2	40	22	1	0
22.23	1	2	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

288

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	+	+	0	0
28.29	0	2	3	+	0
26.27	+	17	37	2	0
24.25	+	13	23	2	0
22.23	0	+	+	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2673

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	0	0	+	0	0
26.27	0	2	5	+	0
24.25	0	9	32	4	0
22.23	0	8	32	4	0
20.21	0	1	2	1	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

430

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	1	+	0	0
26.27	1	5	2	0	0
24.25	1	19	9	+	0
22.23	2	38	19	+	0
20.21	+	2	1	0	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1816

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	0	+	+	0	0
24.25	+	4	3	0	0
22.23	1	21	20	1	0
20.21	1	19	27	1	0
18.19	0	1	1	+	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1669

13

WIND SPEED (KTS)

MP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	1	3	+	0
26.27	+	4	12	2	0
24.25	1	13	42	9	0
22.23	+	3	6	3	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

842

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	+	2	1	0	0
24.25	3	10	5	1	0
22.23	4	25	17	5	0
20.21	2	9	9	2	2
18.19	0	1	1	0	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

627

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	0	1	0	0	0
24.25	0	1	2	0	0
22.23	0	8	8	0	0
20.21	3	20	25	6	0
18.19	+	9	12	4	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

211

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	0	0	0	0	0
24.25	0	0	+	0	0
22.23	+	1	1	+	0
20.21	+	4	6	1	0
18.19	1	21	35	6	+
16.17	+	6	13	3	+
14.15	0	+	+	0	0
12.13	+	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1874

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	1	0	0	0	0
24.25	3	3	0	0	0
22.23	8	32	2	0	0
20.21	10	35	4	0	0
18.19	+	2	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

234

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	+	0	0	0
22.23	+	0	+	0	0
20.21	+	+	+	0	0
18.19	+	3	1	+	0
16.17	2	7	6	1	+
14.15	3	17	23	6	+
12.13	4	9	12	4	+
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

792

22

WIND SPEED (KTS)

MP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	1	0	0
20.21	0	2	2	0	0
18.19	2	20	9	1	0
16.17	6	26	12	2	1
14.15	0	4	5	6	1
12.13	0	2	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

133

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	0	0	0
24.25	0	0	0	0	0
22.23	+	+	2	0	0
20.21	+	6	3	0	0
18.19	6	22	22	4	0
16.17	3	13	9	5	0
14.15	0	1	1	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

209

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	0	0
20.21	+	1	2	+	0
18.19	+	7	12	3	0
16.17	1	17	34	10	+
14.15	+	3	6	2	+
12.13	0	+	0	0	0
10.11	0	0	0	+	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

2033

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	+	+	+	0	0
20.21	+	1	+	+	0
18.19	+	2	3	1	+
16.17	2	11	17	5	+
14.15	2	16	23	10	1
12.13	+	1	2	2	+
10.11	0	+	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

3560

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	0	0	0
16.17	1	+	1	1	0
14.15	3	8	7	2	1
12.13	6	18	15	8	1
10.11	1	6	10	7	1
8.9	+	1	1	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

537

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	0	0	0	0
22.23	+	1	1	0	+
20.21	1	2	3	1	+
18.19	1	6	9	5	1
16.17	2	13	12	6	2
14.15	2	8	8	4	2
12.13	+	2	3	2	1
10.11	+	1	1	1	+
8.9	0	+	+	0	0
6.7	0	0	0	0	0

1643

31

WIND SPEED (KTS)

IP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	+	+	0
22.23	+	+	+	+	+
20.21	+	1	1	+	+
18.19	2	6	5	2	1
16.17	3	13	13	7	4
14.15	2	9	10	7	3
12.13	1	2	3	2	2
10.11	+	1	+	+	+
8.9	0	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1834

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	+	0	0
24.25	0	+	1	+	+
22.23	1	3	5	3	1
20.21	2	9	14	7	3
18.19	2	11	12	6	4
16.17	1	4	4	3	2
14.15	+	1	1	1	1
12.13	0	0	0	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1086

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	0	0
14.15	+	1	1	+	0
12.13	+	1	1	1	+
10.11	2	9	9	9	3
8.9	2	14	17	8	2
6.7	2	5	6	3	1
4.5	0	+	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

745

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	+	0	0	0	0
12.13	+	1	+	0	0
10.11	1	2	2	+	+
8.9	3	6	9	7	2
6.7	3	11	16	7	3
4.5	1	6	7	4	3
2.3	+	1	1	1	1
0.1	0	0	0	0	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

1099

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	1	+	0	0
14.15	1	+	1	+	+
12.13	+	3	2	+	+
10.11	1	6	8	2	1
8.9	4	16	11	5	1
6.7	2	13	12	3	1
4.5	+	2	3	1	0
2.3	+	+	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

680

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	+	0	1	3	+
8.9	1	5	15	14	6
6.7	1	10	17	10	5
4.5	0	2	1	3	1
2.3	0	0	+	1	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

207

40

WIND SPEED (KTS)

P (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	1	+	+
16.17	1	2	3	3	1
14.15	1	4	8	4	2
12.13	1	7	11	7	2
10.11	1	5	9	5	2
8.9	1	2	4	4	2
6.7	+	+	1	2	1
4.5	0	0	+	+	1
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

938

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	0	+	0	+	0
8.9	+	+	2	2	1
6.7	1	4	9	7	9
4.5	1	7	12	14	10
2.3	1	4	5	3	4
0.1	+	+	1	1	1
-2.-1	0	0	0	+	+
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

857

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	0	+	+	0
10.11	0	0	0	+	0
8.9	1	+	1	+	+
6.7	1	3	5	5	1
4.5	1	8	25	17	7
2.3	+	4	7	4	4
0.1	0	+	+	1	1
-2.-1	0	0	1	+	1
-4.-3	0	0	0	0	+
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

557

43

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0.1	3	3	21	21	3
-2.-1	7	10	17	3	10
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0
-18.-17	0	0	0	0	0
-20.-19	0	0	0	0	0

29

44

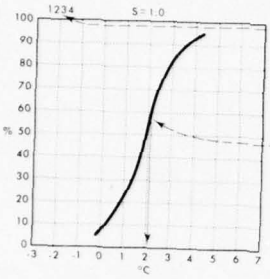
INSUFFICIENT DATA

45

INSUFFICIENT DATA

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

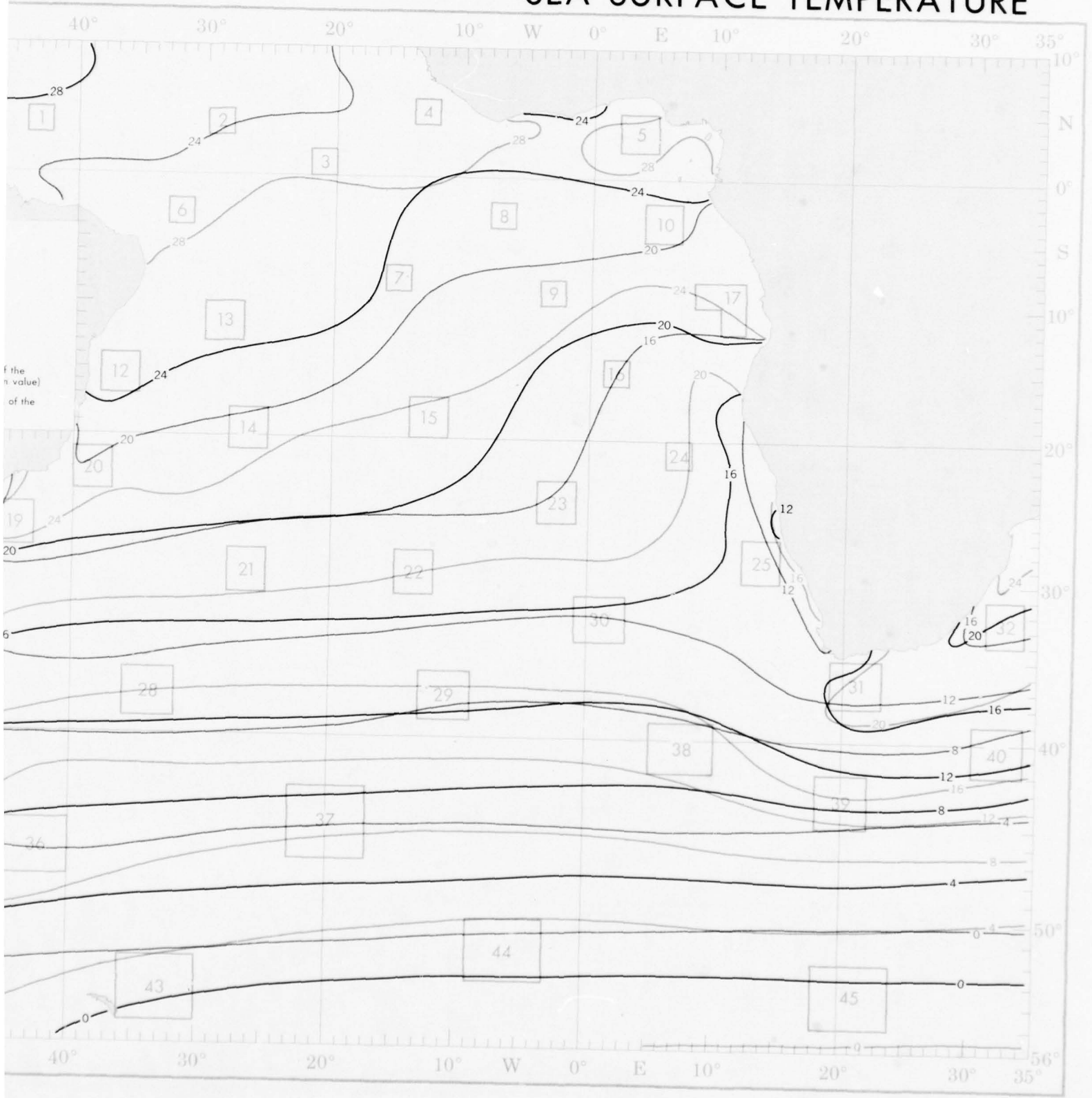
S: Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

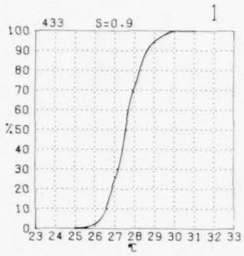
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

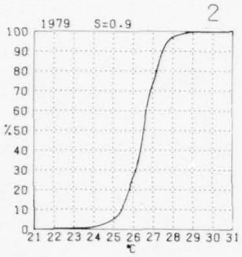
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

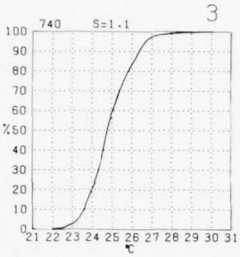
SEA SURFACE TEMPERATURE

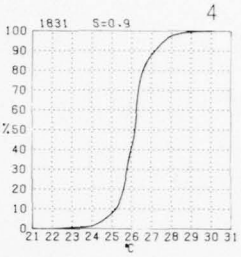


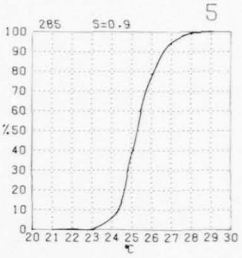
SEA SURFACE TEMPERATURE

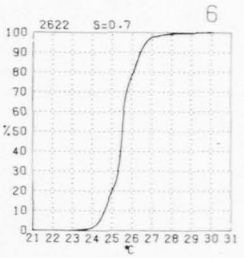


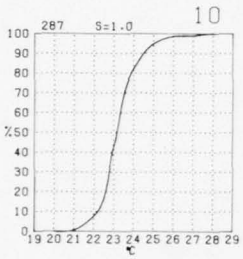


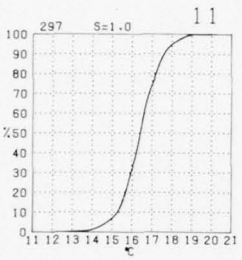


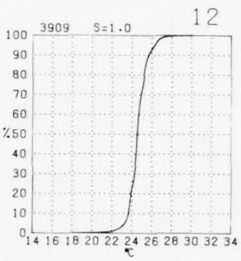


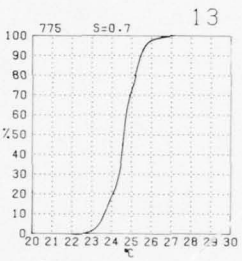


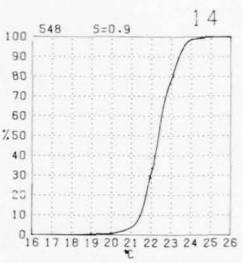


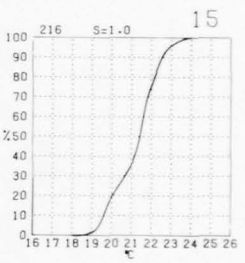


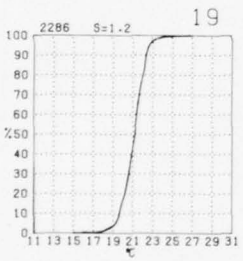


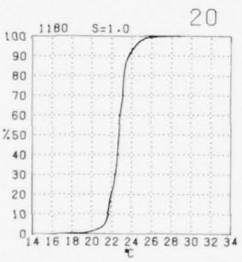


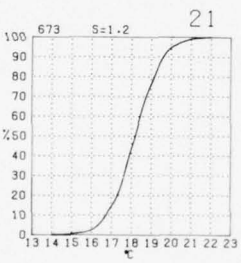


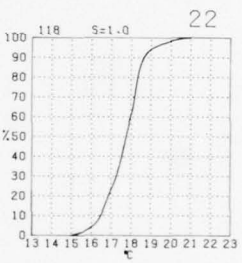


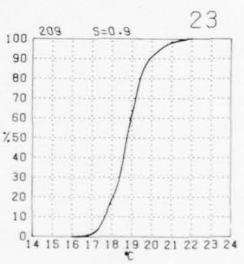


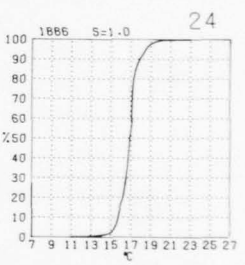


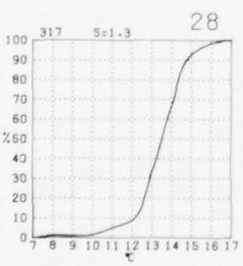


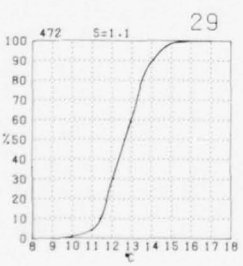


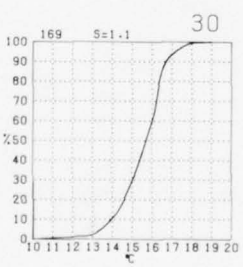


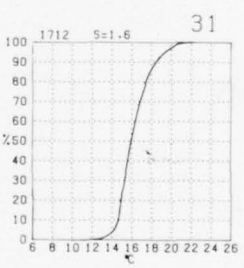


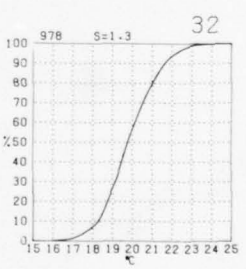


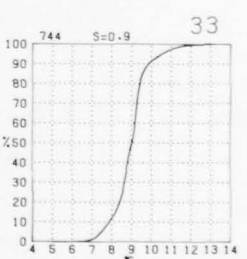






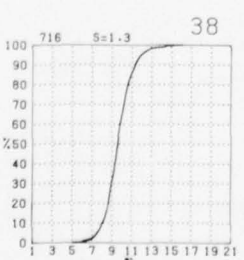


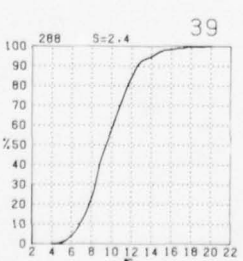


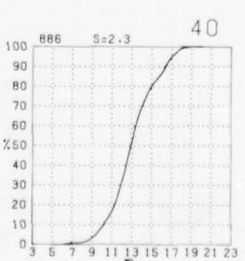


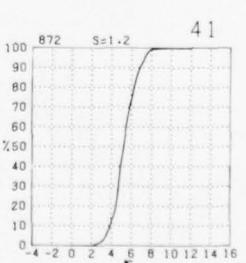
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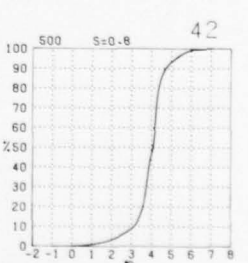
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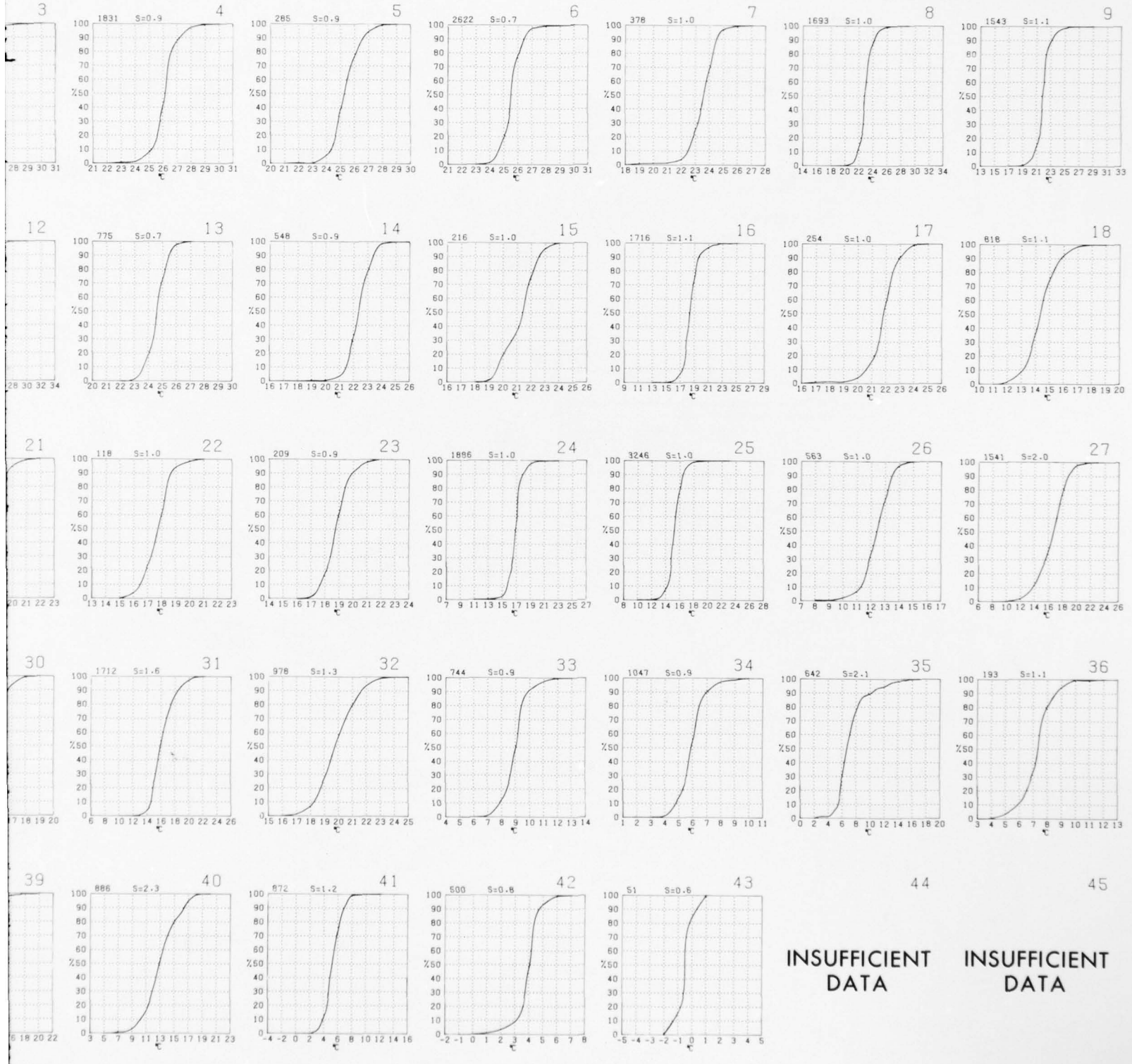




Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

ATURE

SEPTEMBER



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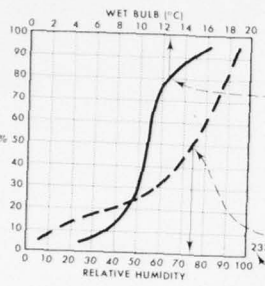
INSUFFICIENT DATA

45

INSUFFICIENT DATA

present the objective compilation of available data for specified areas without regard to suspected biases.
h analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

(50% of all observed relative humidities were ≤74%.)

Number of observations.

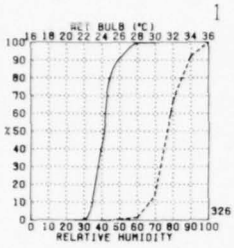
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

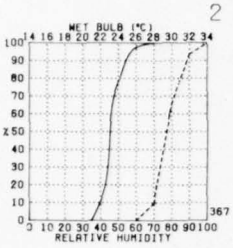
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

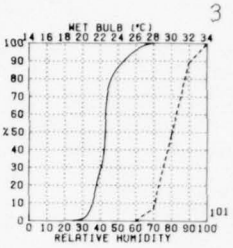
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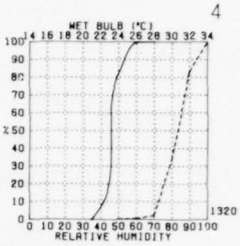

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
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20 16 12 8 4 0
omputed
computed

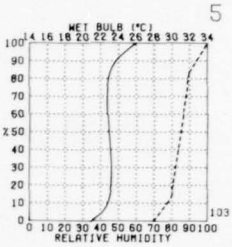
WET BULB AND RELATIVE HUMIDITY

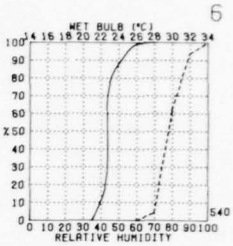
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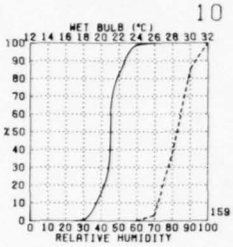
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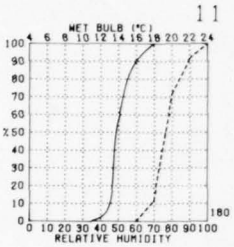
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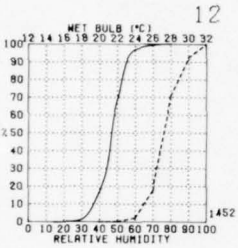
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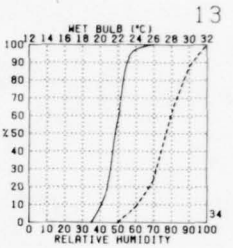
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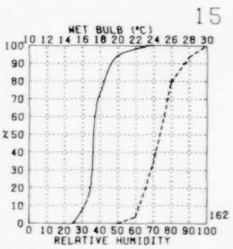
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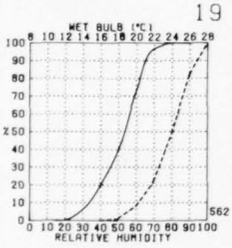
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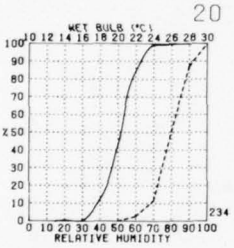
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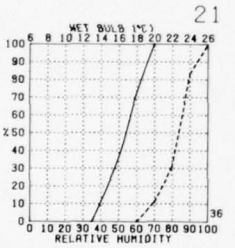
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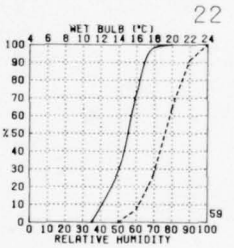
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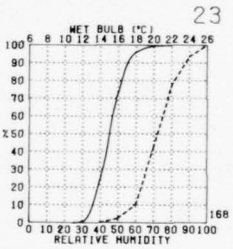
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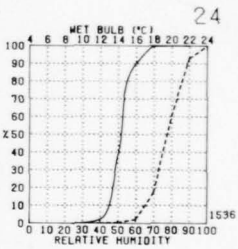
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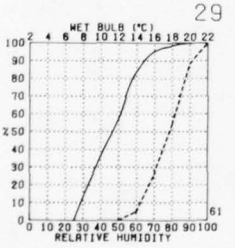
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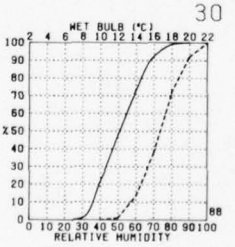
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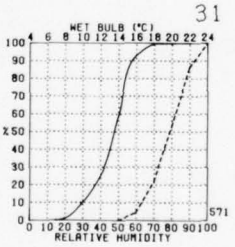
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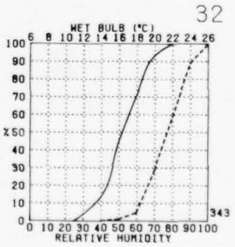
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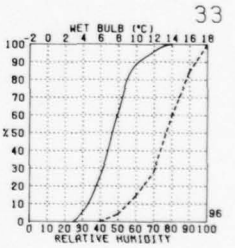
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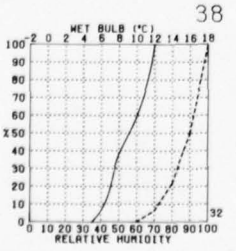
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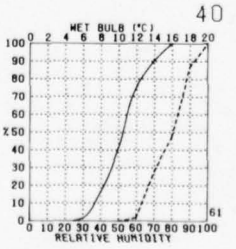
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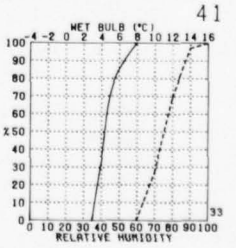
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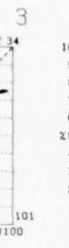
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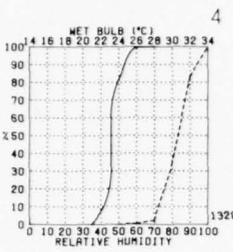
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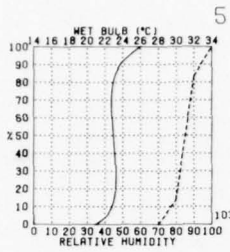
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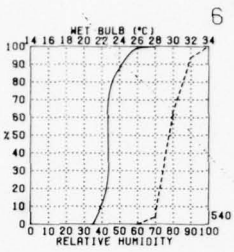
VE HUMIDITY

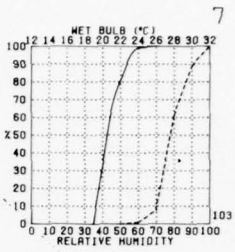
SEPTEMBER

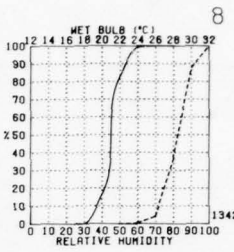


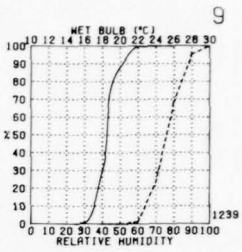




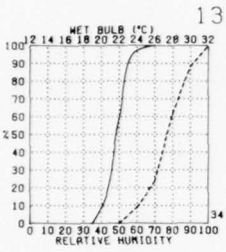






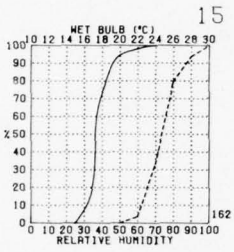


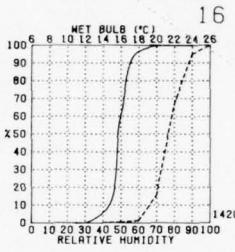


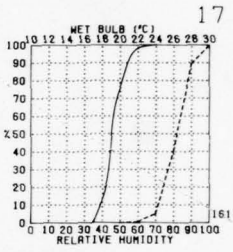


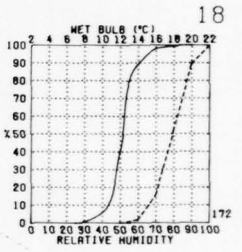
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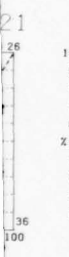
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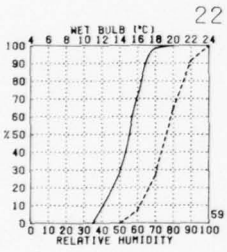


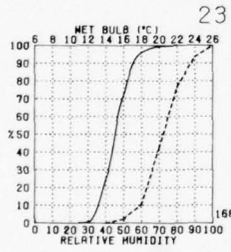


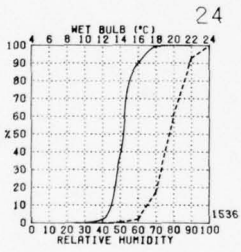


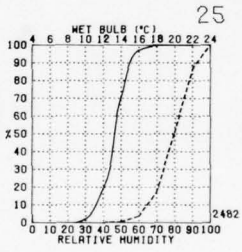


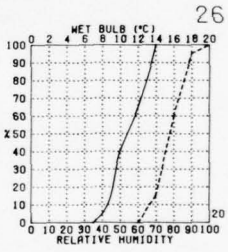


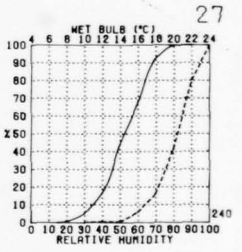


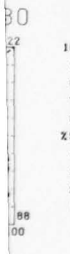


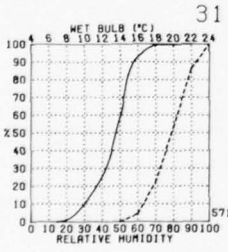


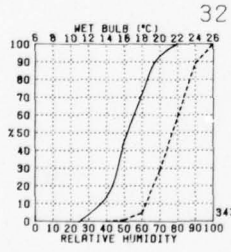


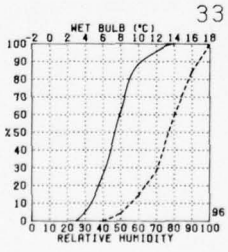


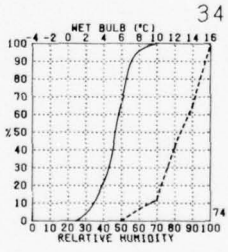


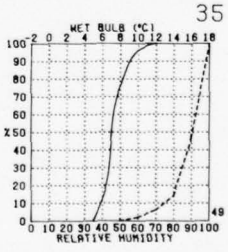






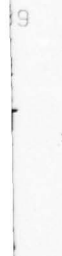


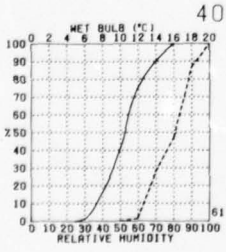


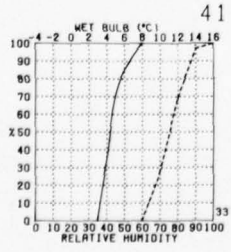


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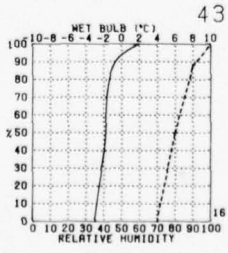






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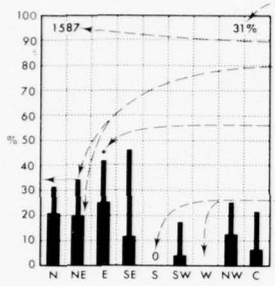
INSUFFICIENT DATA

45

INSUFFICIENT DATA

ent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

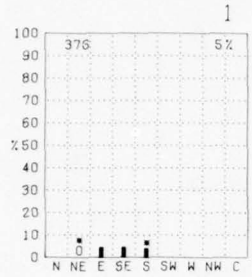
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

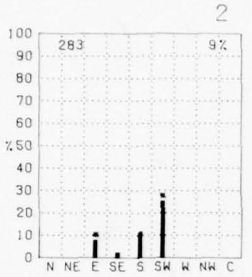
RED LINE - Percent frequency of observations reporting precipitation

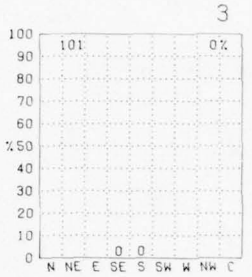
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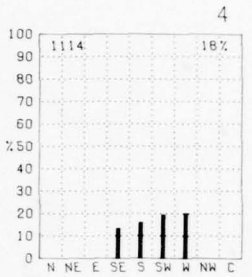


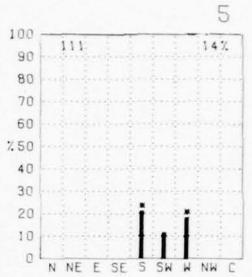
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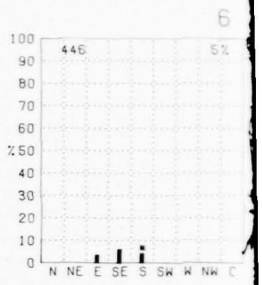


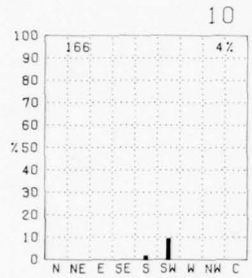


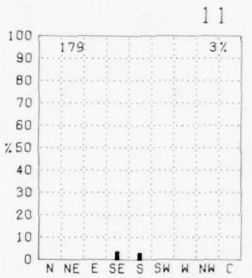


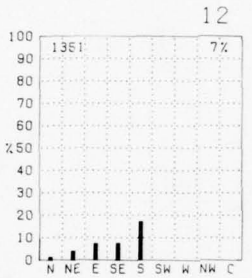


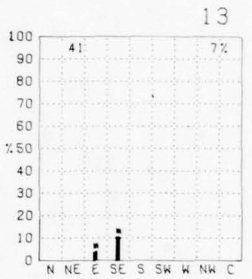






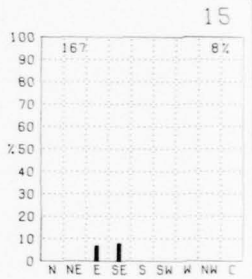


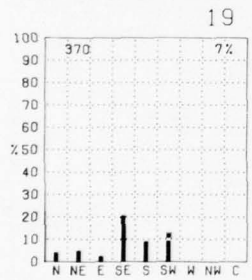


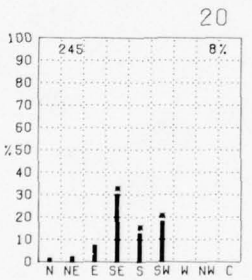


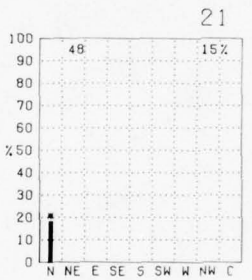
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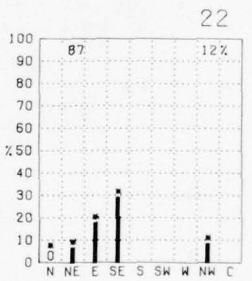
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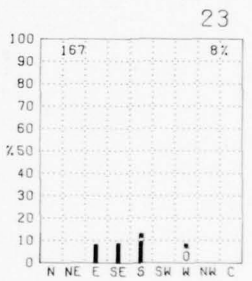


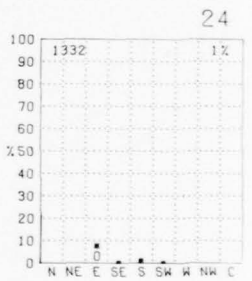






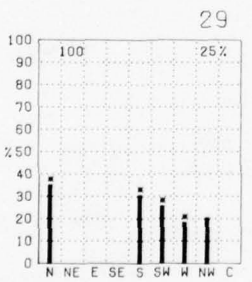


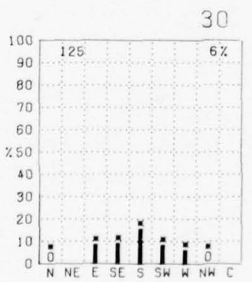


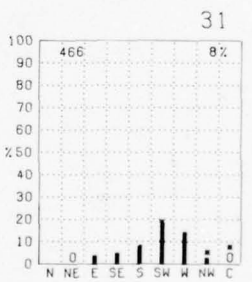


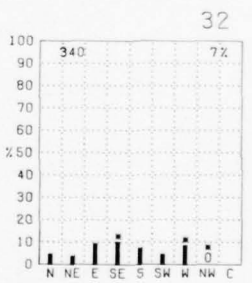
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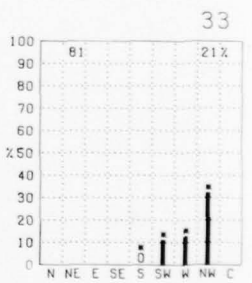
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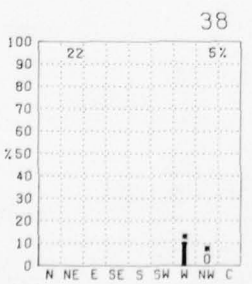






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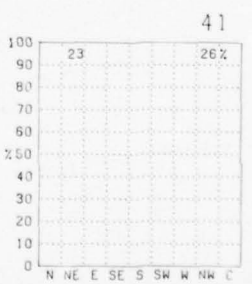


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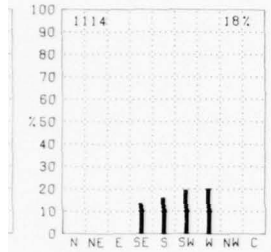
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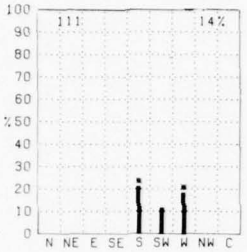
Graphs represent the objective compilation of available data for specified areas without regard to
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SEPTEMBER

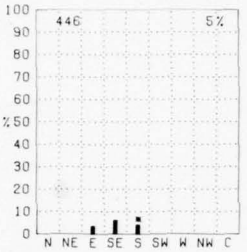
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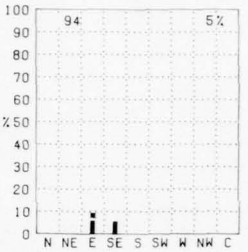
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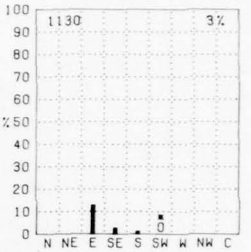
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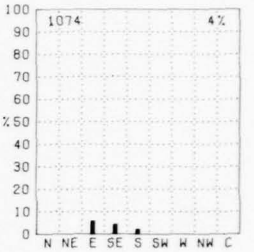
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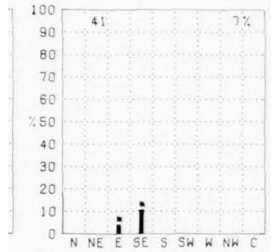
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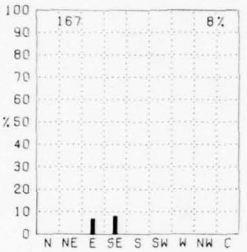
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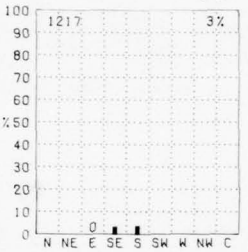
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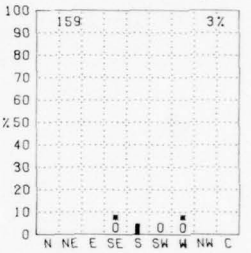
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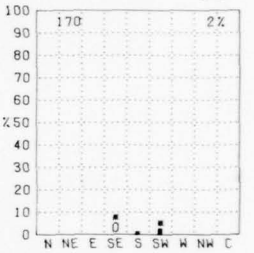
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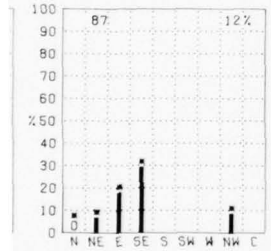
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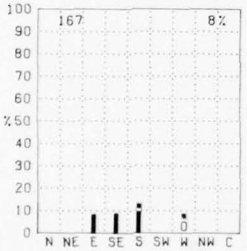
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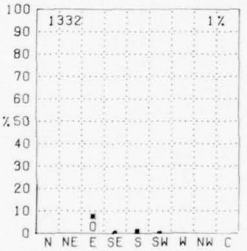
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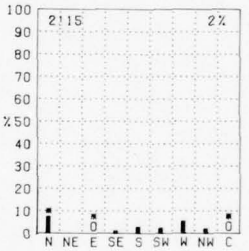
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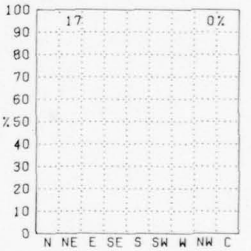
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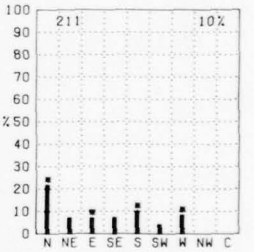
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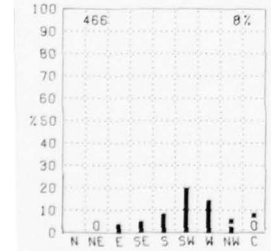
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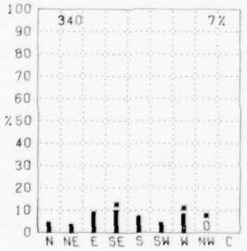
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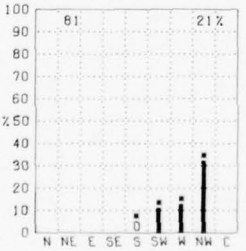
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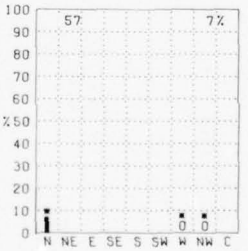
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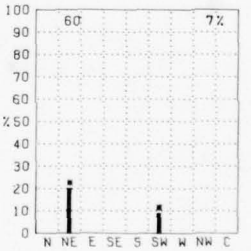
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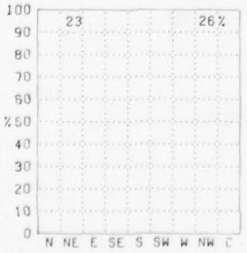
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INSUFFICIENT DATA

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INSUFFICIENT DATA

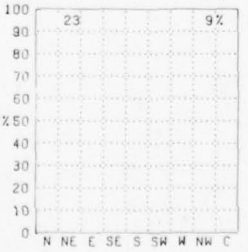
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INSUFFICIENT DATA

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44

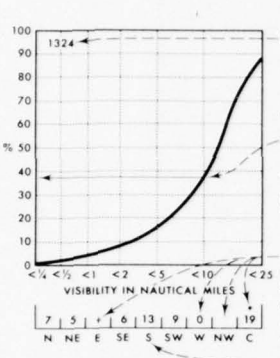
INSUFFICIENT DATA

45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of *all visibilities reported were* <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

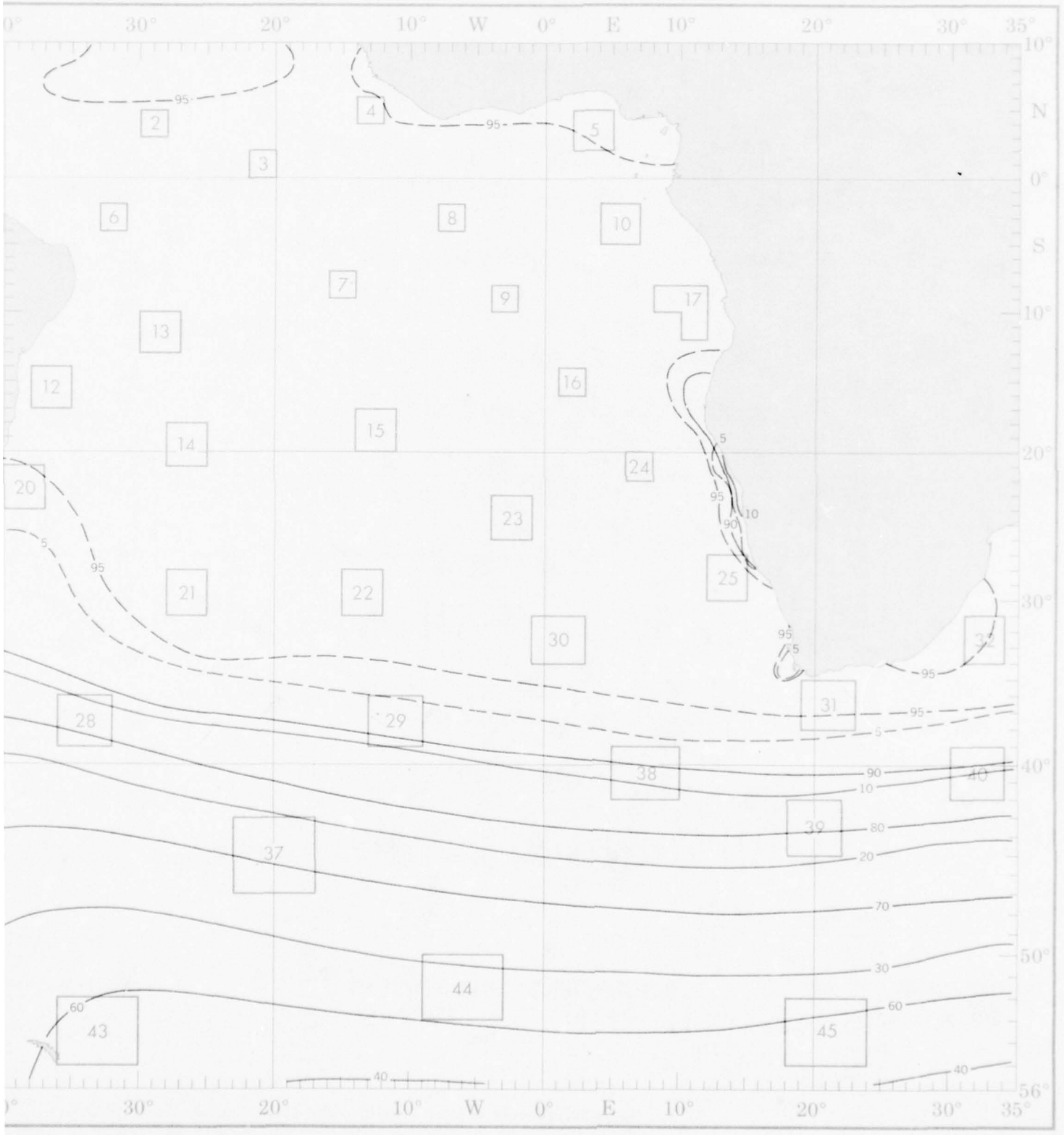
+ indicates < 5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of *all S winds were accompanied by visibilities <2 nautical miles.*)

BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

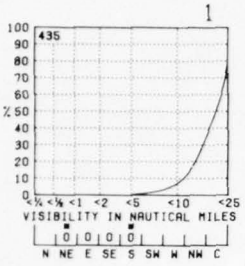
RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

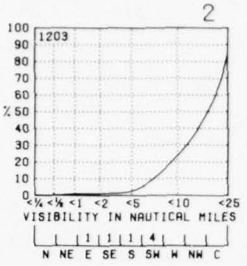

0°
30°
20°
10°
W
0°
E
10°
20°
30°
35°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
2
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VISIBILITY

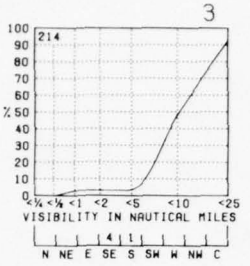
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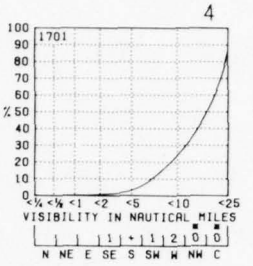
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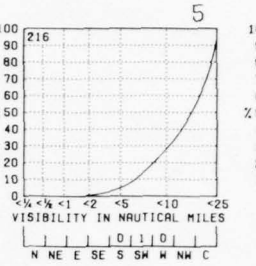
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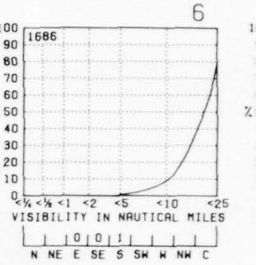
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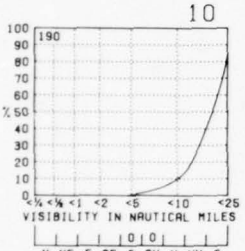
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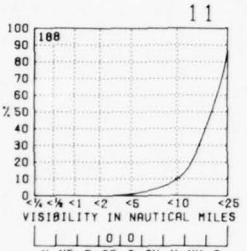
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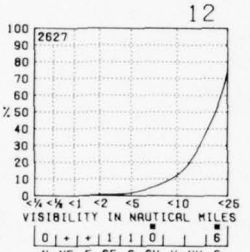
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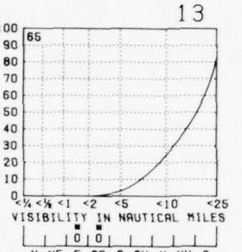
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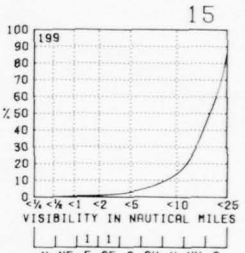
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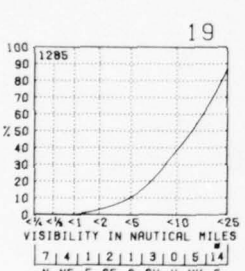
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INSUFFICIENT DATA

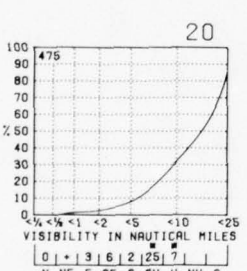
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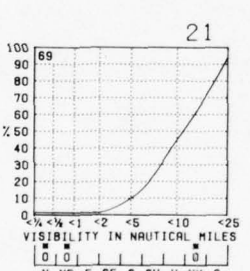
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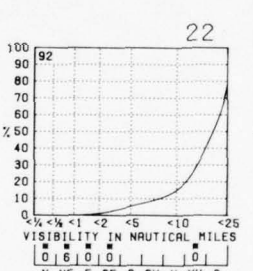
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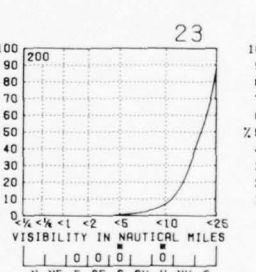
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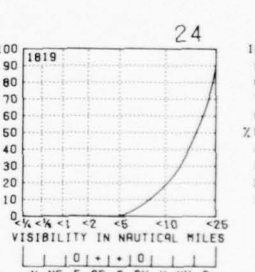
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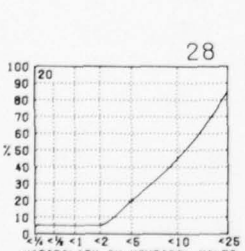
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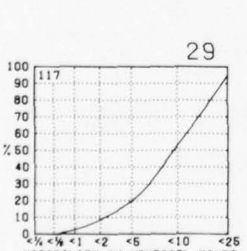
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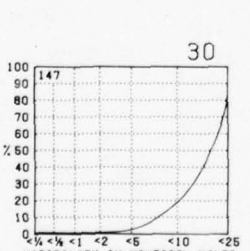
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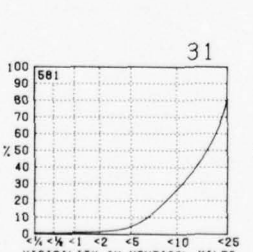
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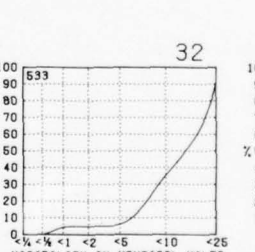
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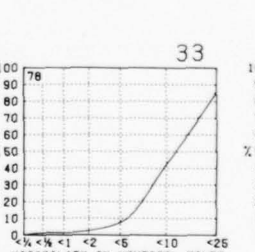
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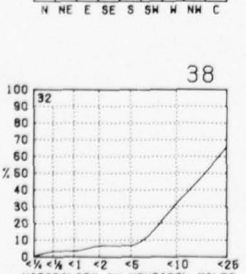
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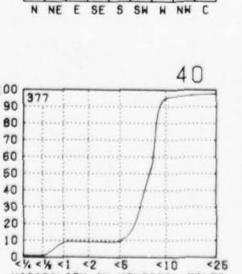
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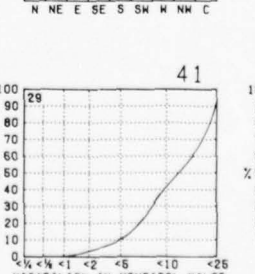
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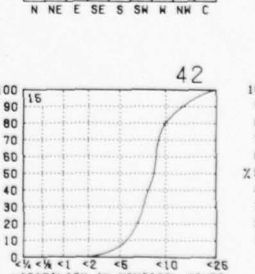
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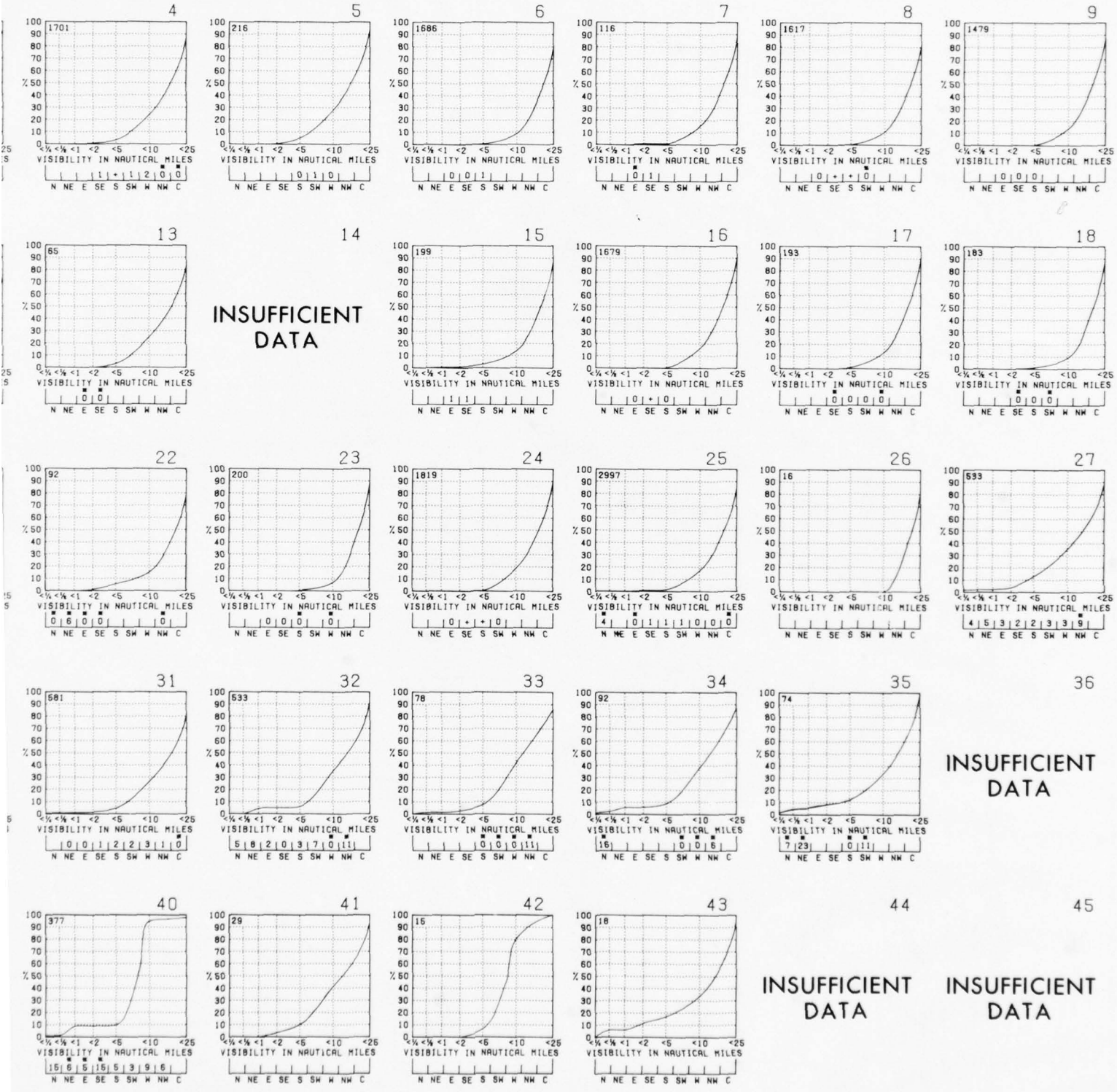


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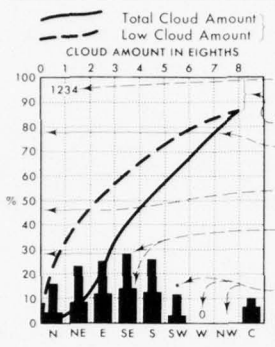
Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias v

SEPTEMBER



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ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.



Low cloud amount. Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

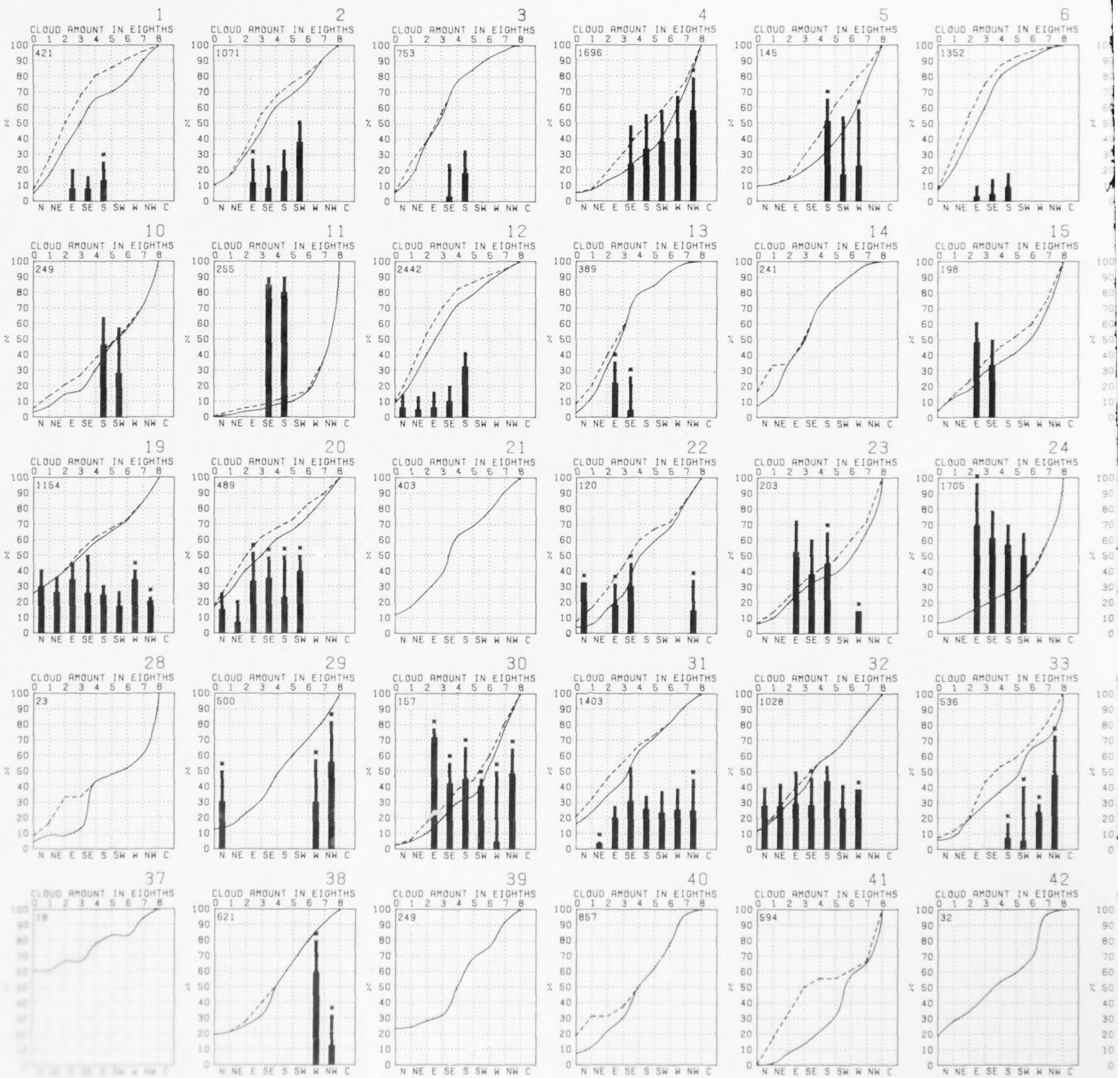
BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

CLOUD COVER

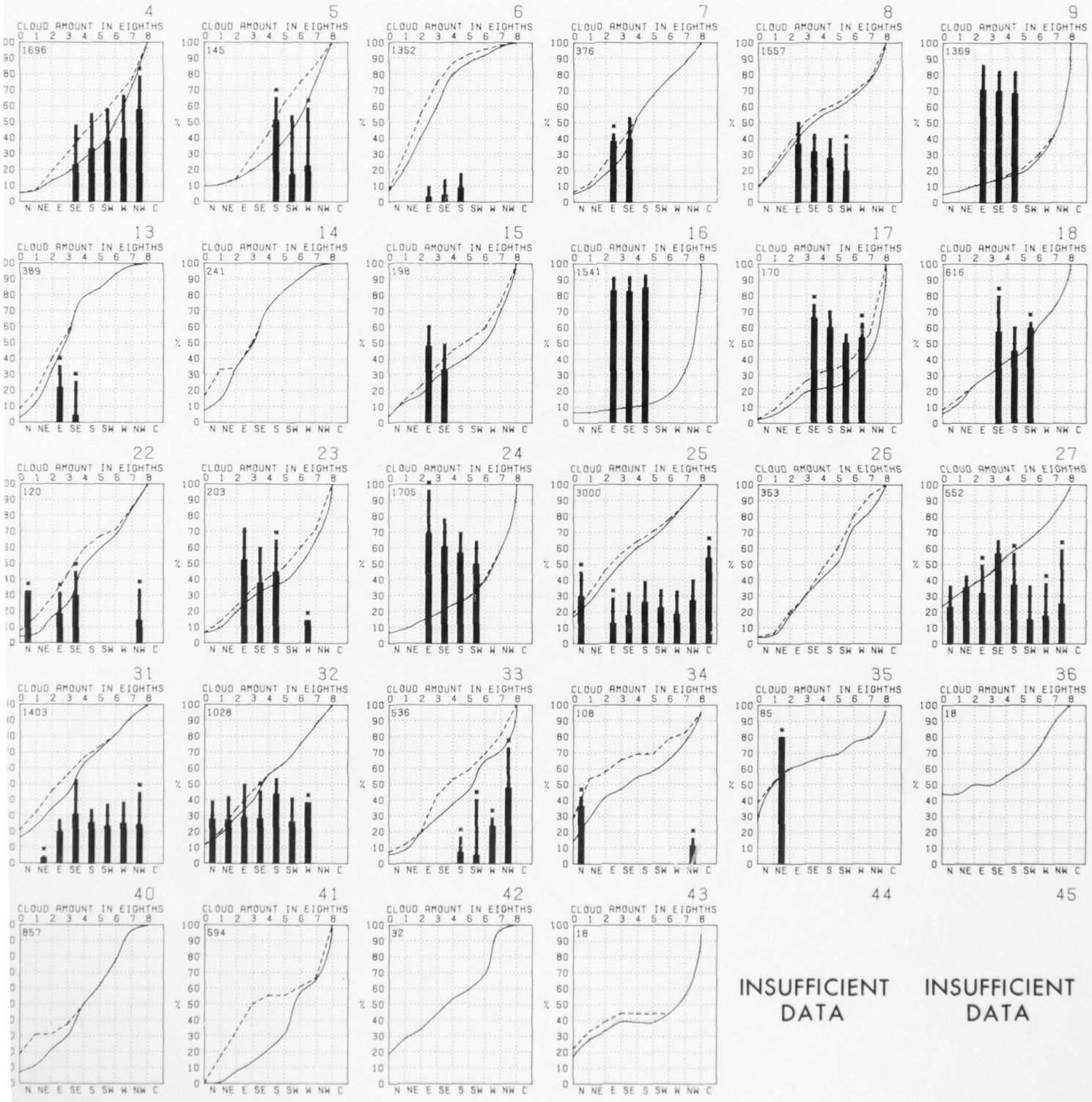

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
2 3 4 5 6 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 37 38 39 40 43 44 45

CLOUD COVER



Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

SEPTEMBER



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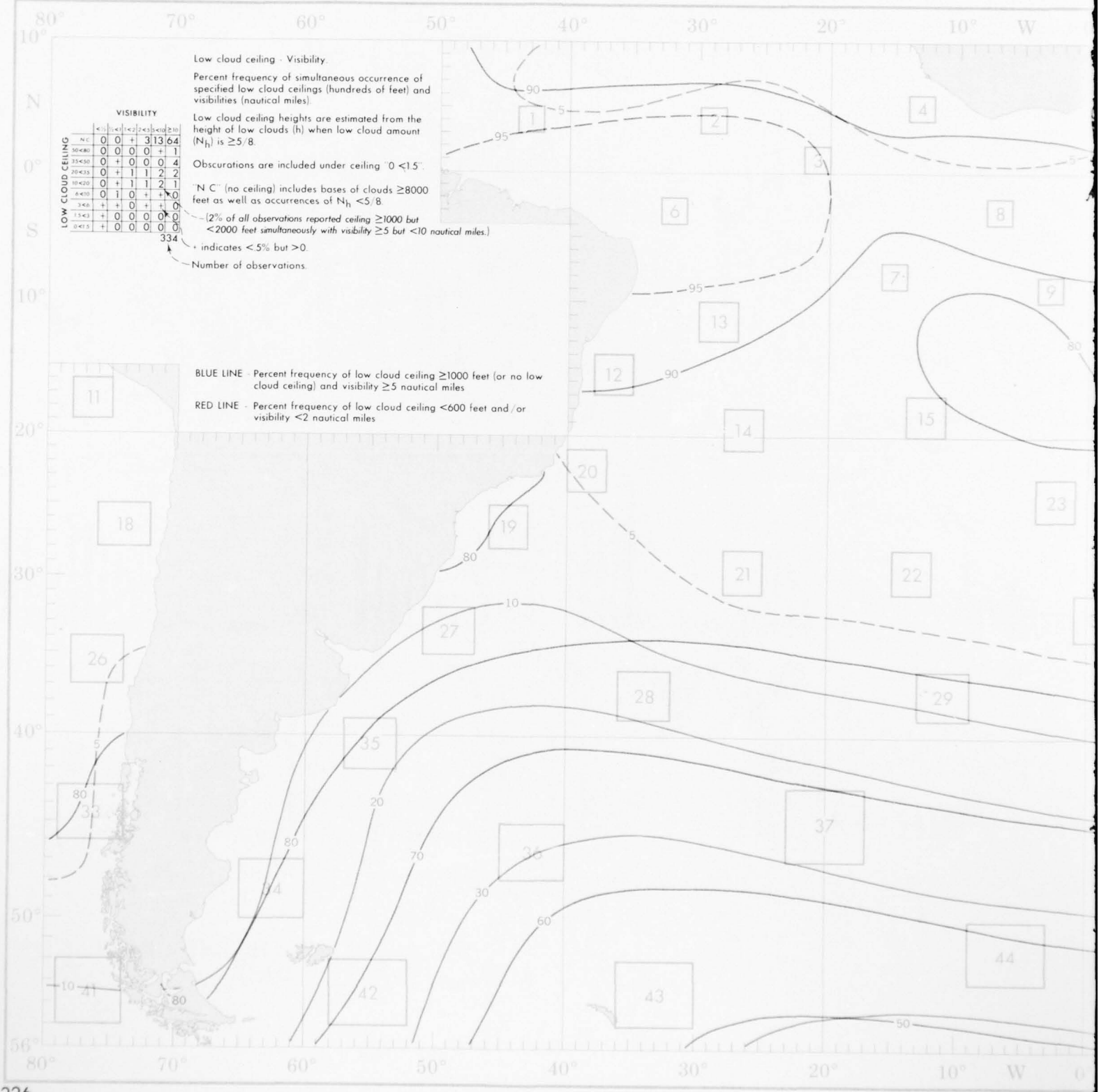
INSUFFICIENT DATA

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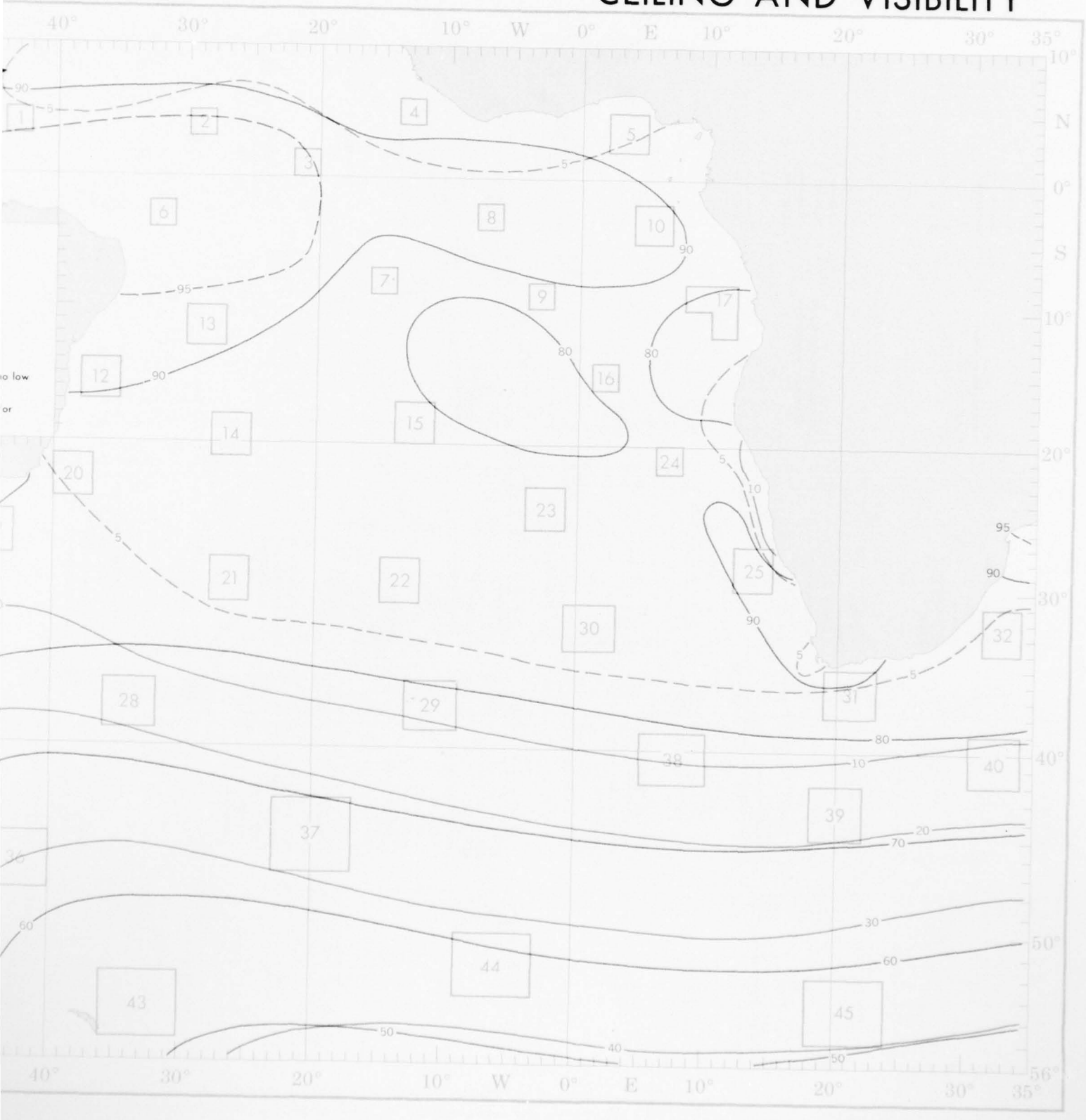
INSUFFICIENT DATA

objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER


Low cloud ceiling - Visibility.
Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
Obscurations are included under ceiling "0 <1.5".
"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
VISIBILITY
LOW CLOUD CEILING
N C 0 0 + 3 13 64
50<80 0 0 0 0 + 1
35<50 0 + 0 0 0 4
20<35 0 + 1 1 2 2
10<20 0 + 1 1 2 1
6<10 0 1 0 + + 0
3<6 + + 0 + + 0
1.5<3 + 0 0 0 0 0
0<1.5 + 0 0 0 0 0
334
(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)
+ indicates <.5% but >0.
Number of observations.
BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles
RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles
80° 70° 60° 50° 40° 30° 20° 10° W
10° N 0° S 10° 20° 30° 40° 50° 56°
90 95 5 80 10 20 30 60 70 50
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 18 19 20 21 22 23 26 27 28 29 33 34 35 36 37 41 42 43 44

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	79
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	+	2
10<20	0	0	0	0	1	7
6<10	0	0	0	0	1	2
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	+

364

2

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	66
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	2
20<35	0	0	0	1	1	4
10<20	0	0	+	0	1	14
6<10	0	0	0	+	2	4
3<6	+	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

324

3

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	68
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	2
20<35	0	0	0	1	1	4
10<20	0	0	0	0	1	11
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

96

4

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	41
50<80	0	0	0	+	+	1
35<50	0	0	0	+	1	4
20<35	0	0	0	0	1	11
10<20	0	0	+	+	4	20
6<10	0	+	+	1	3	8
3<6	0	+	+	1	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

1187

5

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	36
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	11
10<20	0	0	0	1	4	20
6<10	0	0	0	2	1	8
3<6	0	0	0	0	2	4
1.5<3	0	0	0	0	0	3
0<1.5	0	0	0	0	0	0

107

6

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	85
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	0	0	+	2
10<20	0	0	0	0	+	5
6<10	0	0	+	0	+	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

490

10

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	38
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	3
20<35	0	0	0	0	2	11
10<20	0	0	0	0	3	25
6<10	0	0	0	0	1	12
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	0	0

146

11

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	9
50<80	0	0	0	0	0	3
35<50	0	0	0	0	2	4
20<35	0	0	0	0	1	22
10<20	0	0	0	0	3	35
6<10	0	0	0	0	1	17
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

158

12

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	+	0	+	+	3	79
50<80	0	0	0	0	+	+
35<50	0	0	0	+	+	2
20<35	0	0	+	+	1	3
10<20	0	0	+	+	1	4
6<10	0	0	0	+	1	3
3<6	0	0	+	+	+	+
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	+	+	0

1459

13

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	68
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	6
10<20	0	0	0	0	0	9
6<10	0	0	0	0	3	9
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

34

14

INSUFFICIENT DATA

15

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	44
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	5
10<20	0	1	0	0	3	28
6<10	0	0	0	0	1	10
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

151

19

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	6	55
50<80	0	0	0	0	+	2
35<50	+	0	0	1	2	4
20<35	0	0	0	1	3	5
10<20	0	0	0	1	3	5
6<10	0	0	+	1	2	4
3<6	0	0	0	0	2	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

465

20

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	+	0	3	11	54
50<80	0	0	1	0	0	2
35<50	0	0	0	1	+	1
20<35	0	0	0	1	2	3
10<20	0	+	+	+	2	8
6<10	0	0	+	0	3	4
3<6	0	0	0	+	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

243

21

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	38
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	3	3	14
10<20	0	0	0	0	3	14
6<10	0	0	0	0	7	7
3<6	0	0	0	0	3	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

29

22

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	5
20<35	0	0	0	2	0	6
10<20	0	0	0	0	0	15
6<10	0	0	0	0	5	2	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	2	0	0	0

62

23

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	1	41
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	10
10<20	0	0	0	0	2	24
6<10	0	0	0	0	3	13
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

167

24

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	21
50<80	0	0	0	0	1	2
35<50	0	0	0	0	+	6
20<35	0	0	0	0	2	18
10<20	0	0	0	+	5	30
6<10	0	0	0	0	2	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	+	0	+

1382

28

INSUFFICIENT DATA

29

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	25
50<80	0	0	0	0	0	0
35<50	0	0	0	0	2	2
20<35	0	0	0	0	4	13
10<20	0	0	0	5	2	25
6<10	0	4	0	2	4	11
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

55

30

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	36
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	2	1	10
10<20	0	0	0	0	1	24
6<10	0	0	0	1	2	15
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

94

31

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	64
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	7
10<20	0	0	+	+	2	11
6<10	0	0	0	+	1	2
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

316

32

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	53
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	1
20<35	0	0	0	+	1	7
10<20	0	0	0	1	4	15
6<10	0	0	0	+	4	7
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	+	+	+	0

331

33

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	11	42
50<80	0	0	2	0	0	0
35<50	0	0	0	0	2	4
20<35	2	0	0	0	2	4
10<20	0	0	0	2	2	7
6<10	0	0	0	0	11	5
3<6	0	0	0	0	2	0
1.5<3	0	0	0	0	4	0
0<1.5	0	0	0	2	0	0

57

37

INSUFFICIENT DATA

38

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	40
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	4	44
6<10	0	0	0	0	0	4
3<6	0	0	4	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	4	0	0	0	0	0

25

39

INSUFFICIENT DATA

40

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	40
50<80	0	0	0	0	7	7
35<50	0	0	0	0	0	0
20<35	0	0	0	0	20	7
10<20	0	0	0	0	7	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

41

VISIBILITY

LOW CLOUD CEILING	<1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	13	0
6<10	0	0	0	0	0	19
3<6	0	0	0	0	6	6
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

16

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

SEPTEMBER

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	+	3	41
50<80	0	0	0	+	+	1
35<50	0	0	0	+	1	4
20<35	0	0	0	0	1	11
10<20	0	0	+	+	4	20
6<10	0	+	+	1	3	8
3<6	0	+	+	1	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

1187

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	6	36
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	11
10<20	0	0	0	1	4	20
6<10	0	0	0	2	1	8
3<6	0	0	0	0	2	4
1.5<3	0	0	0	0	0	3
0<1.5	0	0	0	0	0	0

107

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	2	85
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	1
20<35	0	0	0	0	+	2
10<20	0	0	0	0	+	5
6<10	0	0	+	0	+	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

490

7

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	5	45
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	17
10<20	0	0	0	0	1	20
6<10	0	0	0	0	1	8
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

87

8

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	1	58
50<80	0	0	0	+	+	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	1	9
10<20	0	0	0	0	1	19
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	+	0	0
0<1.5	0	0	0	0	0	0

1211

9

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	+	1	17
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	7
20<35	0	0	0	0	1	18
10<20	0	0	0	+	3	37
6<10	0	0	0	0	1	12
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	+

1099

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	0	68
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	6
10<20	0	0	0	0	0	9
6<10	0	0	0	0	3	9
3<6	0	0	0	0	0	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

34

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	3	44
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	5
10<20	0	1	0	0	3	28
6<10	0	0	0	0	1	10
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	0

151

16

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	+	8
50<80	0	0	0	0	+	2
35<50	0	0	0	0	1	8
20<35	0	0	0	+	2	21
10<20	0	0	0	0	4	37
6<10	0	0	0	0	2	14
3<6	0	0	0	+	+	+
1.5<3	0	0	0	+	0	0
0<1.5	0	0	0	0	0	0

1268

17

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	0	34
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	5
20<35	0	0	0	0	1	14
10<20	0	0	0	0	5	28
6<10	0	0	0	0	4	9
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

151

18

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	1	35
50<80	0	0	0	0	1	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	11
10<20	0	0	0	1	3	32
6<10	0	0	0	0	2	10
3<6	0	0	0	1	1	0
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

165

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	5	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	5
20<35	0	0	0	2	0	6
10<20	0	0	0	0	0	15
6<10	0	0	0	5	2	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	2	0	0	0

62

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	1	1	41
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	10
10<20	0	0	0	0	2	24
6<10	0	0	0	0	3	13
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

167

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	3	21
50<80	0	0	0	0	1	2
35<50	0	0	0	0	+	6
20<35	0	0	0	0	2	18
10<20	0	0	0	+	5	30
6<10	0	0	0	0	2	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	+	0	+

1382

25

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	+	5	60
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	7
10<20	0	0	0	0	1	14
6<10	0	0	0	+	1	5
3<6	0	+	+	+	+	+
1.5<3	0	0	0	0	+	+
0<1.5	+	0	0	+	+	0

2202

26

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	0	47
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	13
20<35	0	0	0	0	0	40
10<20	0	0	0	0	0	0
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

27

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	2	7	45
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	5
20<35	0	0	0	+	2	8
10<20	0	0	0	2	4	7
6<10	0	0	0	2	3	6
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	+	0

227

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	1	4	64
50<80	0	0	0	0	0	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	7
10<20	0	0	+	+	2	11
6<10	0	0	0	+	1	2
3<6	0	0	+	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

316

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	4	53
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	1
20<35	0	0	0	+	1	7
10<20	0	0	0	1	4	15
6<10	0	0	0	+	4	7
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	+	+	+	0

331

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	11	42
50<80	0	0	2	0	0	0
35<50	0	0	0	0	2	4
20<35	2	0	0	0	2	4
10<20	0	0	0	2	2	7
6<10	0	0	0	0	11	5
3<6	0	0	0	0	2	0
1.5<3	0	0	0	0	4	0
0<1.5	0	0	0	2	0	0

57

34

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	2	16	53
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	2
10<20	0	0	0	0	2	6
6<10	0	0	0	0	0	6
3<6	0	0	0	2	0	4
1.5<3	0	0	0	0	2	0
0<1.5	4	0	0	0	0	0

51

35

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	14	55
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	4
20<35	0	0	0	0	2	10
10<20	2	0	0	6	0	2
6<10	0	0	0	0	0	0
3<6	0	0	2	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	2	2	0	0	0	0

51

36

INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	0	40
50<80	0	0	0	0	7	7
35<50	0	0	0	0	0	0
20<35	0	0	0	0	20	7
10<20	0	0	0	0	7	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

15

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2≤1	1<2	2≤5	5<10	≥10
NC	0	0	0	0	0	56
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	13	0
6<10	0	0	0	0	0	19
3<6	0	0	0	0	6	6
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

16

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER


Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
WIND SPEED (knots)
LCC - Vsby
0-3
4-10
11-21
22-33
≥34
<1.5 & or <.5
<6 & or <2
Vsby <2
<10 & or <2
<20 & or <5
Vsby ≥5
≥50 & ≥5
N.C. & ≥10
3 2 1 + 0
2 2 1 1 +
1 2 1 1 +
3 4 2 1 1
8 9 6 5 2
9 11 12 3 1
12 13 15 7 3
4 2 1 + 0
(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)
"N.C." (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
+ indicates <.5% but >0.
1234 ← Number of observations.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions. LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions between poor and optimum
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
10
20
30
40
50
60
15
1
2
3
4
6
7
8
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41
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43
44

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	2	0	0
<20 & OR <5	1	7	7	0	0
VSBY ≥5	3	43	53	1	0
≥50 & ≥5	2	35	44	1	0
NC & ≥10	2	34	42	1	0

363

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	+	4	3	0	0
<20 & OR <5	1	13	9	1	0
VSBY ≥5	4	59	34	1	0
≥50 & ≥5	2	42	24	1	0
NC & ≥10	2	40	23	1	0

323

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	3	0	0
<20 & OR <5	0	13	8	1	0
VSBY ≥5	1	59	36	2	0
≥50 & ≥5	1	41	27	1	0
NC & ≥10	1	39	27	1	0

96

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	7	7	0	0
<20 & OR <5	1	19	19	+	0
VSBY ≥5	4	50	43	+	0
≥50 & ≥5	2	24	19	+	0
NC & ≥10	2	22	17	0	0

1179

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	7	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	13	7	0	0
<20 & OR <5	1	24	19	0	0
VSBY ≥5	4	58	36	0	0
≥50 & ≥5	3	25	14	0	0
NC & ≥10	3	21	13	0	0

107

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	+	0
VSBY <2	0	0	0	+	0
<10 & OR <2	0	1	1	+	0
<20 & OR <5	+	2	5	+	0
VSBY ≥5	+	37	51	1	0
≥50 & ≥5	0	34	54	1	0
NC & ≥10	0	32	52	1	0

486

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	8	4	0	0
<20 & OR <5	3	27	12	1	0
VSBY ≥5	6	70	22	1	0
≥50 & ≥5	3	32	6	0	0
NC & ≥10	3	29	6	0	0

145

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	12	1	0
<20 & OR <5	1	23	32	3	0
VSBY ≥5	3	40	50	8	0
≥50 & ≥5	1	7	4	1	0
NC & ≥10	0	6	3	1	0

158

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	+	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	3	2	+	0
<20 & OR <5	+	5	6	1	0
VSBY ≥5	3	55	38	2	0
≥50 & ≥5	3	49	30	1	0
NC & ≥10	3	47	29	1	0

1442

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	15	0	0
<20 & OR <5	0	0	24	0	0
VSBY ≥5	0	29	71	0	0
≥50 & ≥5	0	26	41	0	0
NC & ≥10	0	26	41	0	0

34

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	4	9	1	0
<20 & OR <5	1	13	26	4	0
VSBY ≥5	3	35	51	10	0
≥50 & ≥5	2	19	21	6	0
NC & ≥10	1	17	20	6	0

150

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	3	5	2	0
<20 & OR <5	1	8	12	3	0
VSBY ≥5	3	34	46	10	0
≥50 & ≥5	3	24	30	6	0
NC & ≥10	2	22	27	5	0

459

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	3	1	0
VSBY <2	0	0	2	1	0
<10 & OR <2	+	2	7	2	0
<20 & OR <5	+	8	14	3	0
VSBY ≥5	4	24	51	13	1
≥50 & ≥5	3	14	39	10	+
NC & ≥10	3	14	32	6	+

235

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	3	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	14	3	0
<20 & OR <5	7	3	21	7	0
VSBY ≥5	7	21	55	14	0
≥50 & ≥5	0	7	24	10	0
NC & ≥10	0	7	24	7	0

29

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	0	2	0	0
VSBY <2	0	0	2	0	0
<10 & OR <2	0	5	6	0	0
<20 & OR <5	2	18	8	0	0
VSBY ≥5	13	48	21	6	3
≥50 & ≥5	10	29	15	5	3
NC & ≥10	10	27	11	5	3

62

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	6	3	0
<20 & OR <5	4	15	19	6	0
VSBY ≥5	10	41	39	10	0
≥50 & ≥5	7	20	17	1	0
NC & ≥10	6	17	17	1	0

166

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	7	2	+
<20 & OR <5	1	13	26	7	+
VSBY ≥5	2	26	55	17	+
≥50 & ≥5	+	6	14	5	+
NC & ≥10	+	5	12	4	+

1375

28

INSUFFICIENT DATA

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	2	2	0
VSBY <2	0	0	2	2	0
<10 & OR <2	0	2	15	4	0
<20 & OR <5	2	4	42	5	0
VSBY ≥5	5	18	58	7	0
≥50 & ≥5	4	9	11	4	0
NC & ≥10	4	9	11	2	0

55

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	9	6	1	0
<20 & OR <5	2	23	20	1	0
VSBY ≥5	4	44	42	6	0
≥50 & ≥5	2	19	16	3	0
NC & ≥10	1	19	14	2	0

93

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	1	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	1	3	1	0
<20 & OR <5	+	4	9	6	1
VSBY ≥5	6	36	36	18	2
≥50 & ≥5	5	28	25	11	1
NC & ≥10	5	26	23	10	1

309

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	+	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	6	5	2	2
<20 & OR <5	1	11	13	6	4
VSBY ≥5	5	31	38	17	7
≥50 & ≥5	4	18	21	10	4
NC & ≥10	3	18	19	8	3

325

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	2	0
<6 & OR <2	0	4	2	4	2
VSBY <2	0	2	0	2	0
<10 & OR <2	0	4	11	9	4
<20 & OR <5	0	5	12	14	5
VSBY ≥5	5	25	39	19	5
≥50 & ≥5	5	19	21	7	0
NC & ≥10	5	18	12	7	0

57

37

INSUFFICIENT DATA

38

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	5	0	0
<6 & OR <2	0	0	9	0	0
VSBY <2	0	0	9	0	0
<10 & OR <2	0	0	9	0	0
<20 & OR <5	0	14	45	0	0
VSBY ≥5	0	18	64	9	0
≥50 & ≥5	0	5	27	9	0
NC & ≥10	0	5	27	9	0

22

39

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	7	0	13	0
VSBY ≥5	0	13	40	40	7
≥50 & ≥5	0	0	33	13	7
NC & ≥10	0	0	27	13	0

15

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	6	6
VSBY <2	0	0	0	0	0
<10 & OR <2	0	13	6	6	6
<20 & OR <5	0	13	6	6	19
VSBY ≥5	6	31	25	19	19
≥50 & ≥5	6	19	19	13	0
NC & ≥10	6	19	19	13	0

16

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

IBILITY-WIND

SEPTEMBER

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	7	7	0	0
<20 & OR <5	1	19	19	+	0
VSBY ≥5	4	50	43	+	0
≥50 & ≥5	2	24	19	+	0
NC & ≥10	2	22	17	0	0

1179

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	7	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	13	7	0	0
<20 & OR <5	1	24	19	0	0
VSBY ≥5	4	58	36	0	0
≥50 & ≥5	3	25	14	0	0
NC & ≥10	3	21	13	0	0

107

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	+	0
VSBY <2	0	0	0	+	0
<10 & OR <2	0	1	1	+	0
<20 & OR <5	+	2	5	+	0
VSBY ≥5	+	37	61	1	0
≥50 & ≥5	0	34	54	1	0
NC & ≥10	0	32	52	1	0

486

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	9	1	0
<20 & OR <5	0	6	26	1	0
VSBY ≥5	0	26	72	2	0
≥50 & ≥5	0	15	36	0	0
NC & ≥10	0	12	34	0	0

86

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	5	1	+	0
<20 & OR <5	1	18	7	+	0
VSBY ≥5	4	64	31	+	0
≥50 & ≥5	2	39	19	+	0
NC & ≥10	2	37	18	+	0

1203

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	6	8	+	0
<20 & OR <5	1	22	30	1	0
VSBY ≥5	2	45	52	1	0
≥50 & ≥5	1	11	9	+	0
NC & ≥10	1	9	7	0	0

1095

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	15	0	0
<20 & OR <5	0	0	24	0	0
VSBY ≥5	0	29	71	0	0
≥50 & ≥5	0	26	41	0	0
NC & ≥10	0	26	41	0	0

34

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	1	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	4	9	1	0
<20 & OR <5	1	13	26	4	0
VSBY ≥5	3	35	51	10	0
≥50 & ≥5	2	19	21	6	0
NC & ≥10	1	17	20	6	0

150

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	5	8	2	+
<20 & OR <5	1	18	32	6	+
VSBY ≥5	3	31	58	8	+
≥50 & ≥5	+	3	7	1	0
NC & ≥10	+	2	5	+	0

1258

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	5	7	1	0	0
<20 & OR <5	10	34	3	0	0
VSBY ≥5	16	77	7	0	0
≥50 & ≥5	5	27	3	0	0
NC & ≥10	5	27	3	0	0

148

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	7	1	0
<20 & OR <5	3	18	24	4	0
VSBY ≥5	4	32	49	13	1
≥50 & ≥5	0	12	17	7	1
NC & ≥10	0	11	16	6	1

164

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	0	0
<6 & OR <2	0	0	2	0	0
VSBY <2	0	0	2	0	0
<10 & OR <2	0	5	6	0	0
<20 & OR <5	2	18	8	0	0
VSBY ≥5	13	48	21	6	3
≥50 & ≥5	10	29	15	5	3
NC & ≥10	10	27	11	5	3

62

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	6	3	0
<20 & OR <5	4	15	19	6	0
VSBY ≥5	10	41	39	10	0
≥50 & ≥5	7	20	17	1	0
NC & ≥10	6	17	17	1	0

166

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	1	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	7	2	+
<20 & OR <5	1	13	26	7	+
VSBY ≥5	2	26	55	17	+
≥50 & ≥5	+	6	14	5	+
NC & ≥10	+	5	12	4	+

1375

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	+	1	+	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	2	3	1	+
<20 & OR <5	1	7	11	3	+
VSBY ≥5	3	30	48	18	1
≥50 & ≥5	2	19	32	13	1
NC & ≥10	2	17	29	12	1

2190

26

INSUFFICIENT DATA

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	+	+	0	0
<6 & OR <2	1	1	+	+	0
VSBY <2	+	+	0	0	0
<10 & OR <2	1	5	4	3	+
<20 & OR <5	3	9	12	4	1
VSBY ≥5	4	33	41	13	1
≥50 & ≥5	2	24	23	5	0
NC & ≥10	1	22	18	4	0

226

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	0	1	1	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	1	3	1	0
<20 & OR <5	+	4	9	6	1
VSBY ≥5	6	36	36	18	2
≥50 & ≥5	5	28	25	11	1
NC & ≥10	5	26	23	10	1

309

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	+	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	6	5	2	2
<20 & OR <5	1	11	13	6	4
VSBY ≥5	5	31	38	17	7
≥50 & ≥5	4	18	21	10	4
NC & ≥10	3	18	19	8	3

325

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	0	2	0
<6 & OR <2	0	4	2	4	2
VSBY <2	0	2	0	2	0
<10 & OR <2	0	4	11	9	4
<20 & OR <5	0	5	12	14	5
VSBY ≥5	5	25	39	19	5
≥50 & ≥5	5	19	21	7	0
NC & ≥10	5	18	12	7	0

57

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	2	2	0	0	0
<6 & OR <2	2	4	2	2	2
VSBY <2	2	2	0	0	0
<10 & OR <2	2	10	2	2	2
<20 & OR <5	2	10	6	6	4
VSBY ≥5	6	26	30	26	4
≥50 & ≥5	6	18	22	20	2
NC & ≥10	2	14	20	14	2

50

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	2	2	0
<6 & OR <2	0	2	4	2	0
VSBY <2	0	2	4	2	0
<10 & OR <2	0	2	4	2	0
<20 & OR <5	0	4	10	2	0
VSBY ≥5	10	37	31	8	0
≥50 & ≥5	8	33	22	6	0
NC & ≥10	6	25	18	6	0

51

36

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	7	0	13	0
VSBY ≥5	0	13	40	40	7
≥50 & ≥5	0	0	33	13	7
NC & ≥10	0	0	27	13	0

15

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	6	6
VSBY <2	0	0	0	0	0
<10 & OR <2	0	13	6	6	6
<20 & OR <5	0	13	6	6	19
VSBY ≥5	6	31	25	19	19
≥50 & ≥5	6	19	19	13	0
NC & ≥10	6	19	19	13	0

16

42

INSUFFICIENT DATA

43

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	6	6	0
<6 & OR <2	0	0	6	6	0
VSBY <2	0	0	6	6	0
<10 & OR <2	0	0	6	17	0
<20 & OR <5	0	6	17	17	17
VSBY ≥5	0	11	28	28	17
≥50 & ≥5	0	6	22	17	0
NC & ≥10	0	6	17	17	0

18

44

INSUFFICIENT DATA

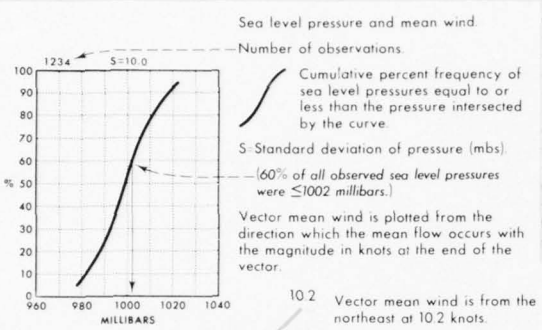
45

INSUFFICIENT DATA

...e objective compilation of available data for specified areas without regard to suspected biases.
...s (opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER

SEA LEVEL PRESS



Sea level pressure and mean wind.

Number of observations.

Cumulative percent frequency of sea level pressures equal to or less than the pressure intersected by the curve.

S-Standard deviation of pressure (mbs).

(60% of *all observed sea level pressures were ≤1002 millibars.*)

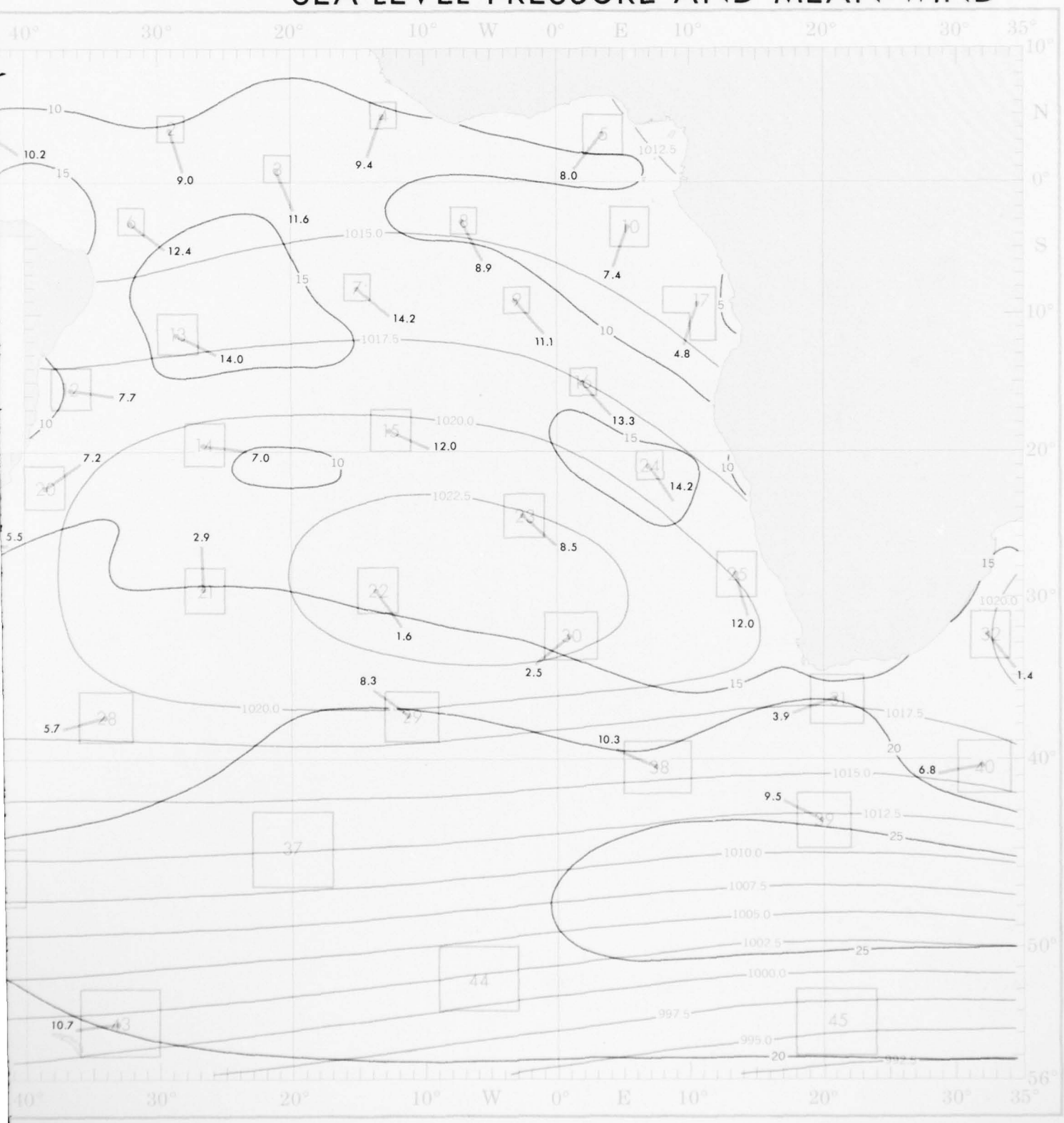
Vector mean wind is plotted from the direction which the mean flow occurs with the magnitude in knots at the end of the vector.

10.2 Vector mean wind is from the northeast at 10.2 knots.

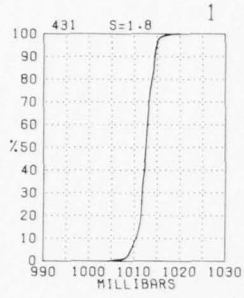
BLUE LINE - Scalar mean wind speed (kts.)

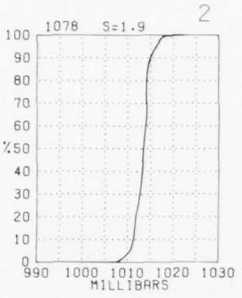
RED LINE - Mean sea level pressure (mbs.)

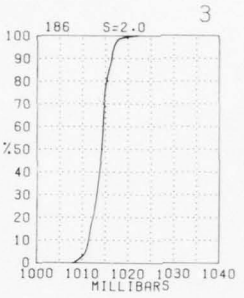
SEA LEVEL PRESSURE AND MEAN WIND

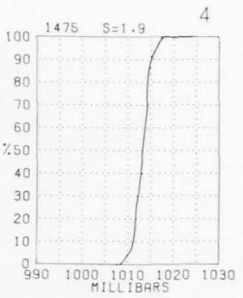


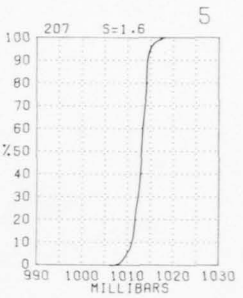
SEA LEVEL PRESSURE

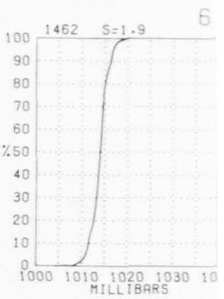


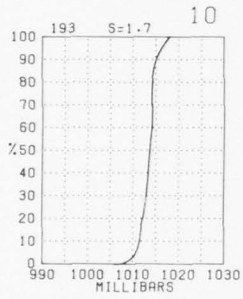


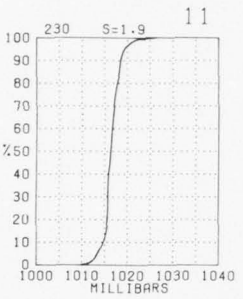


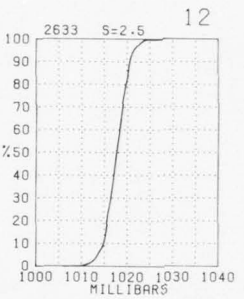


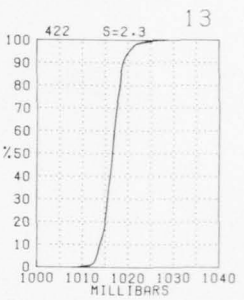


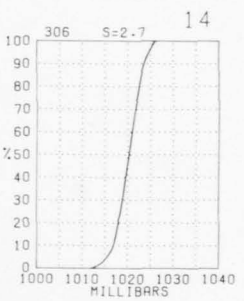


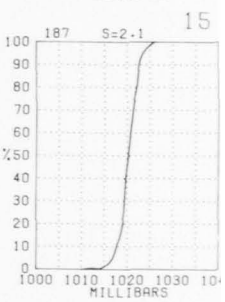


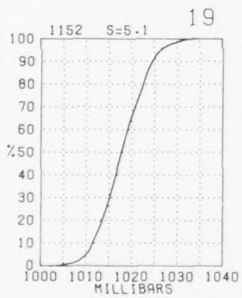


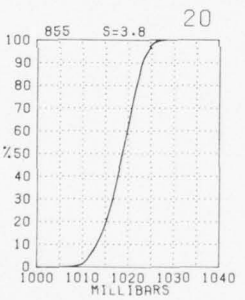


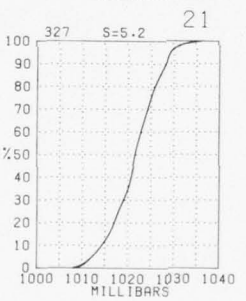


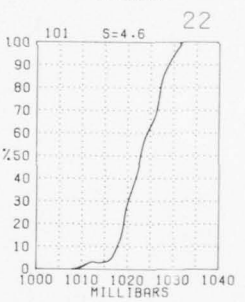


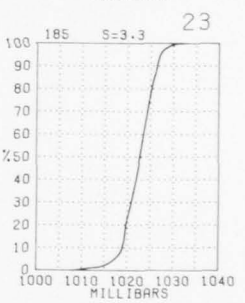


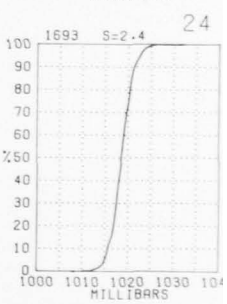


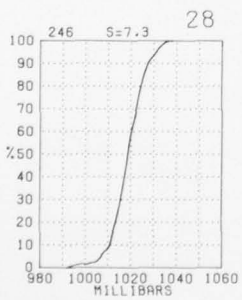


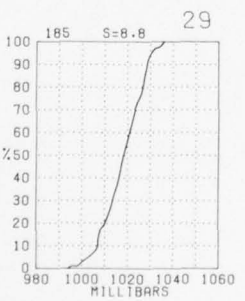


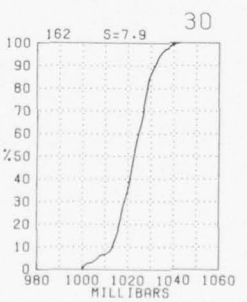


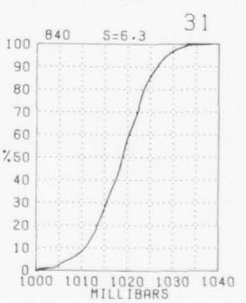


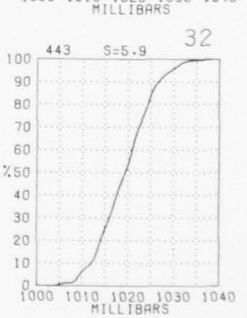


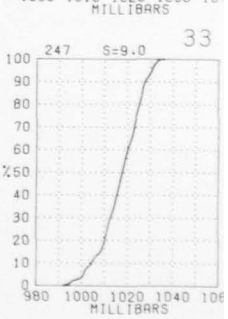






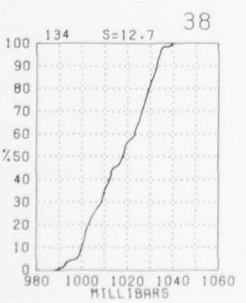


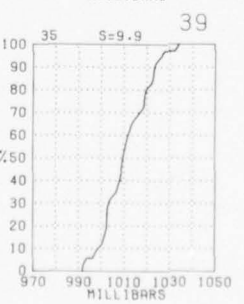


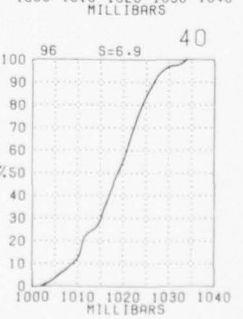


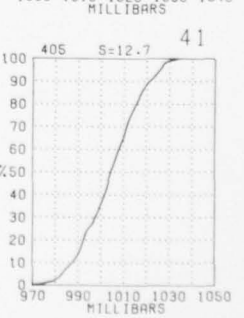
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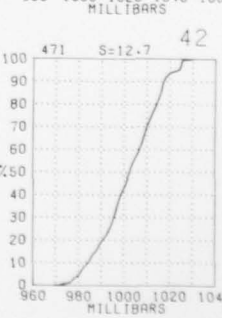
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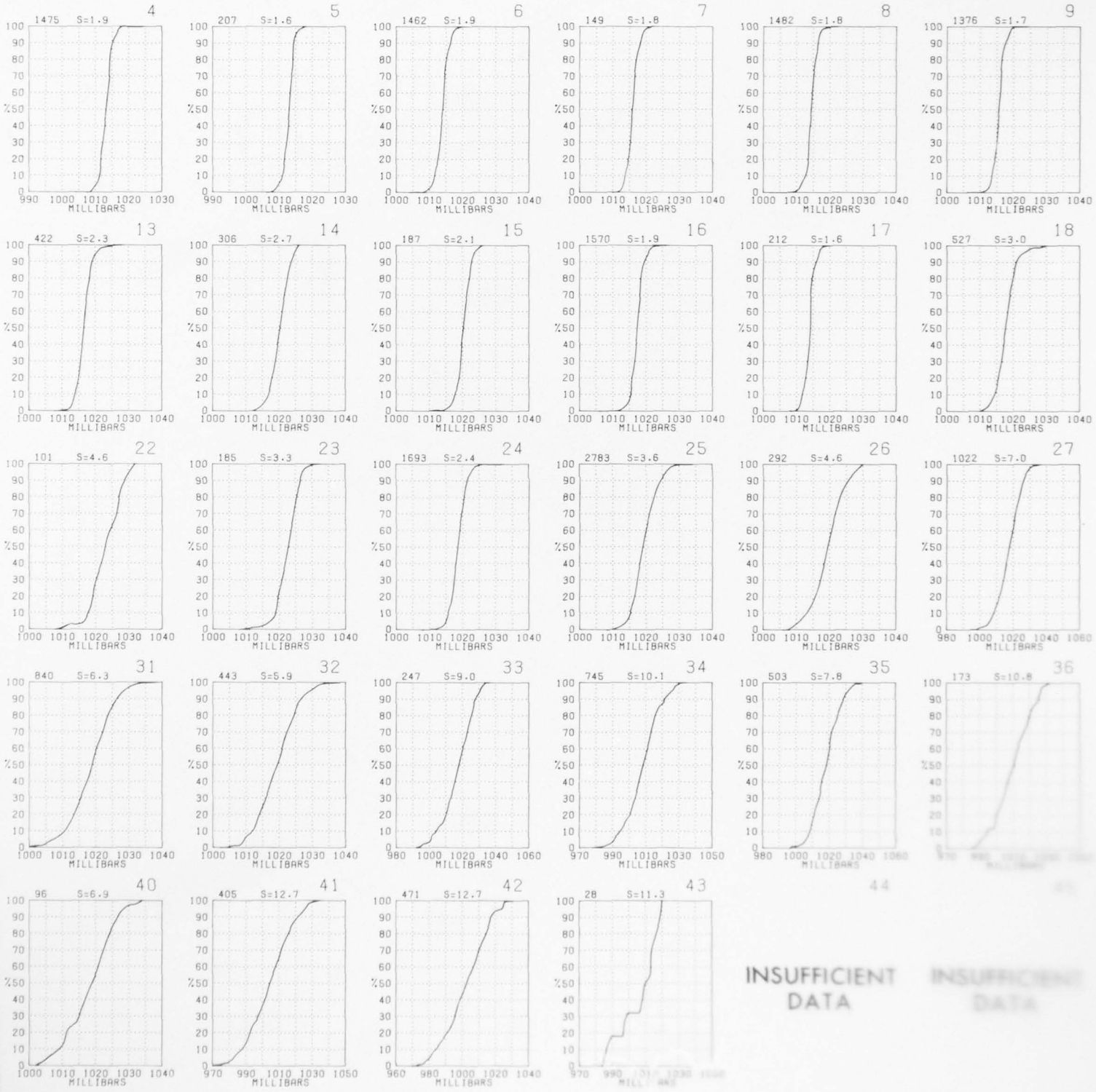






Graphs represent the objective compilation of available data for specified areas without regard
The isopleth analyses (opposite page) are based on all available data subjectively adjusted wh

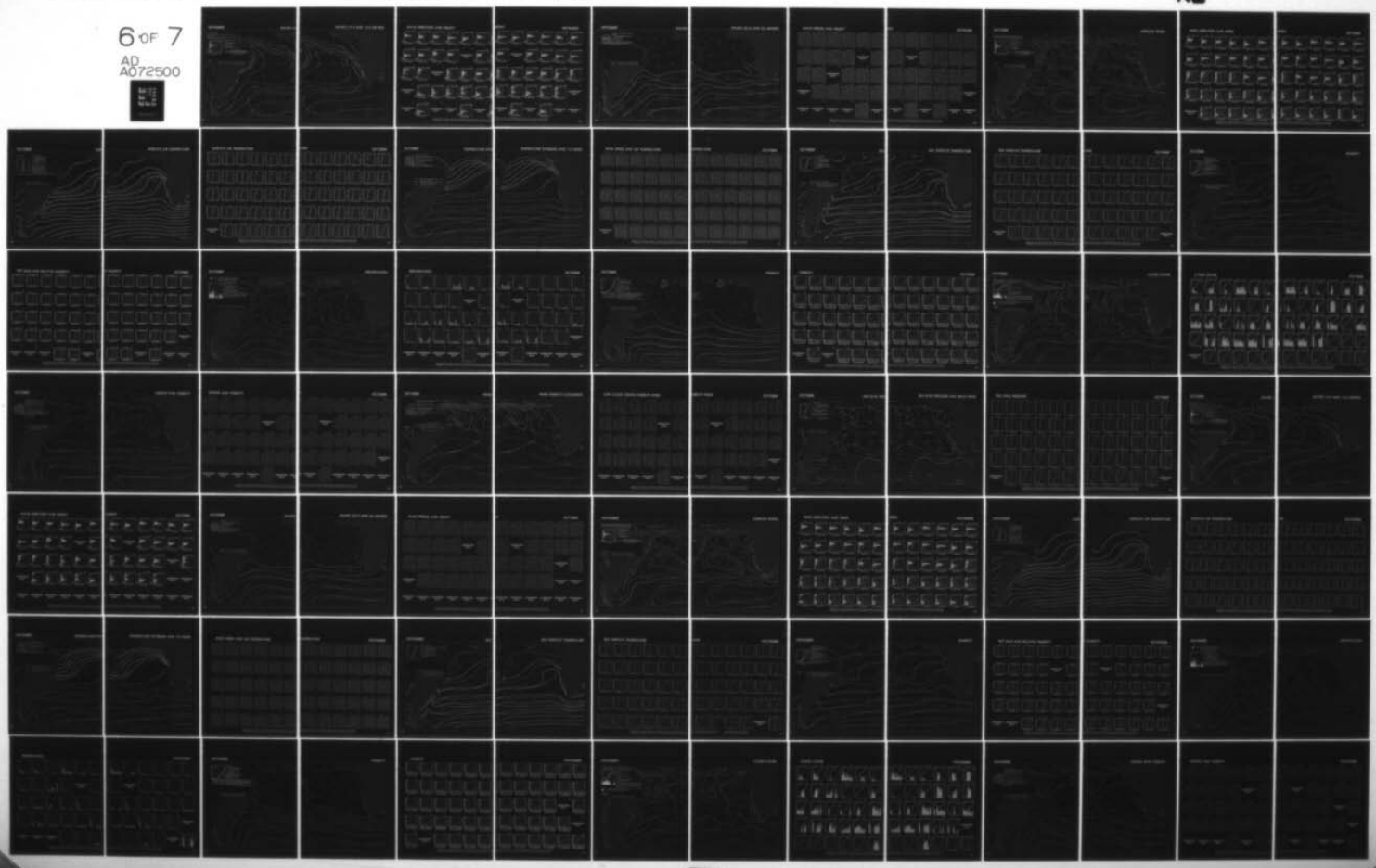
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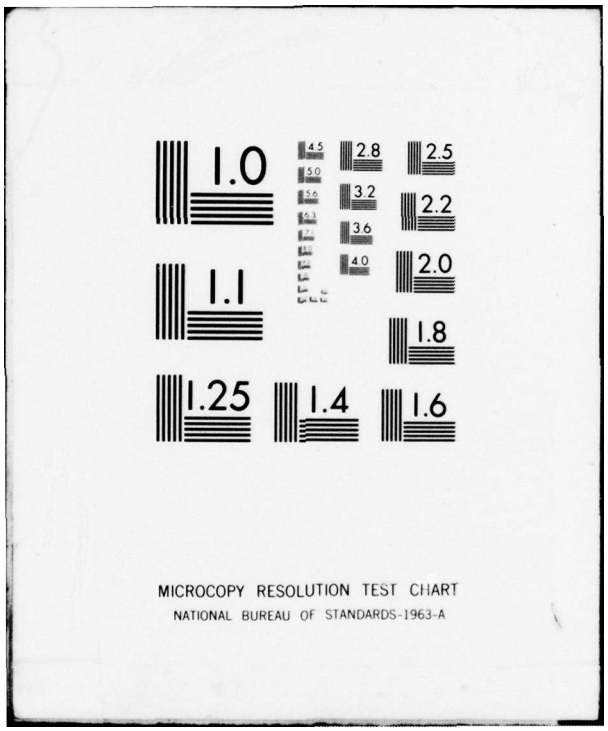


the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

AD-A072 500 NAVAL AIR SYSTEMS COMMAND WASHINGTON DC F/G 4/2
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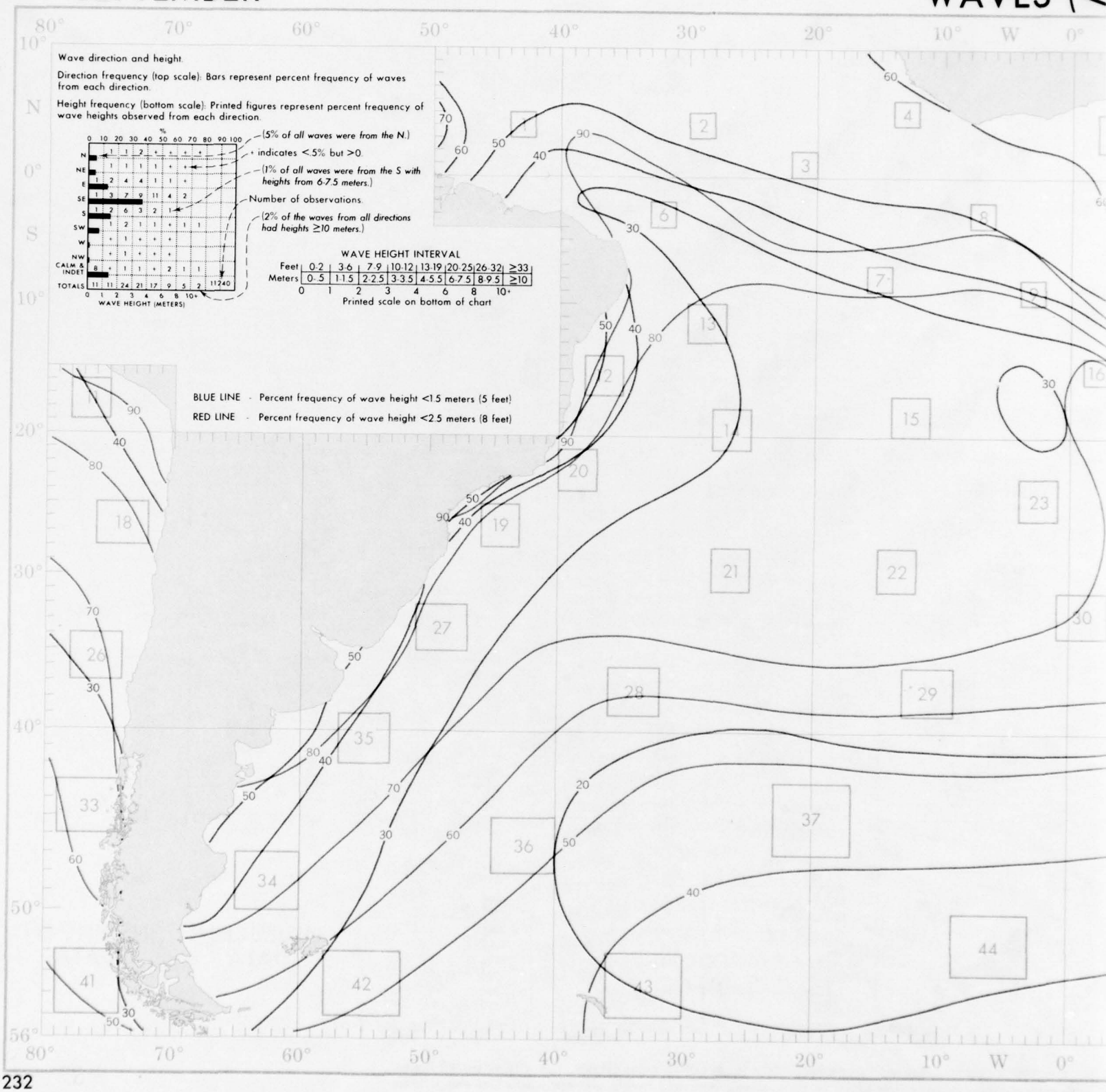
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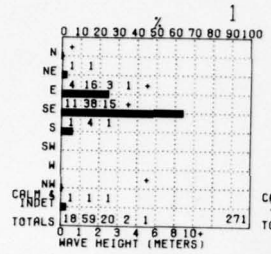
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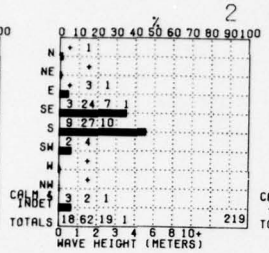


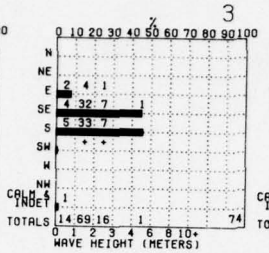
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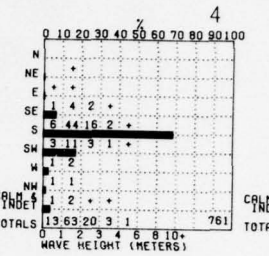


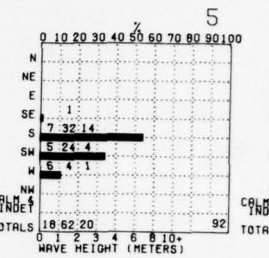
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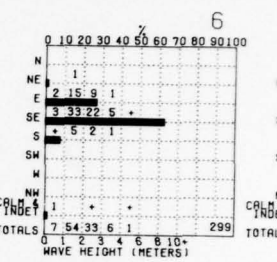


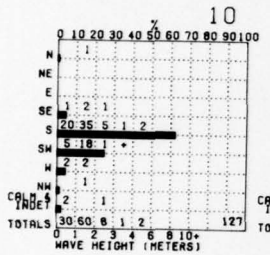


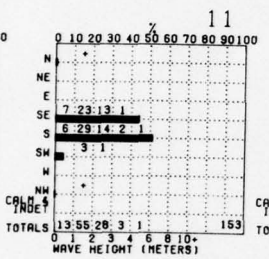


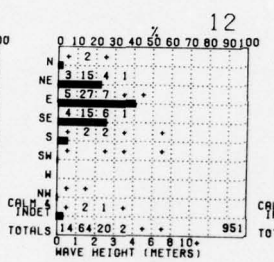


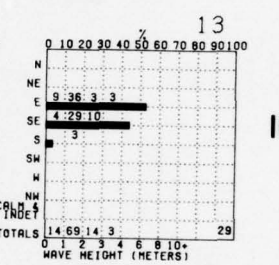






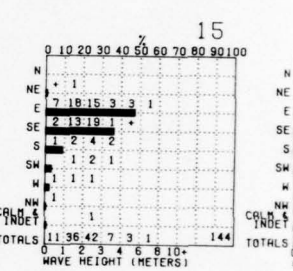


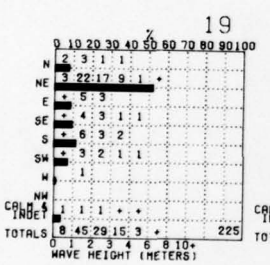


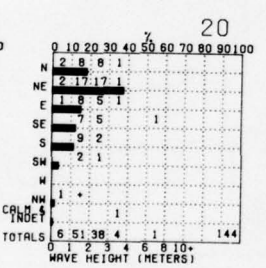


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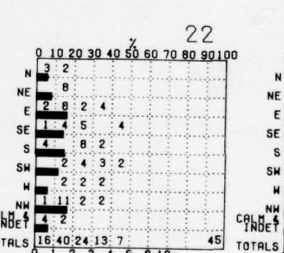


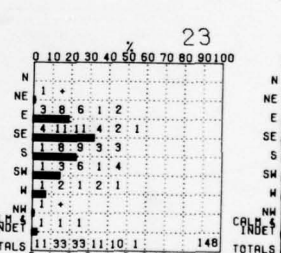


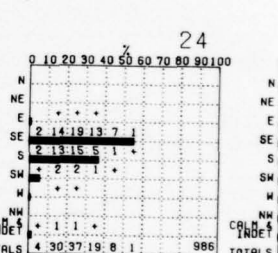


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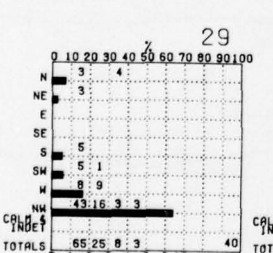


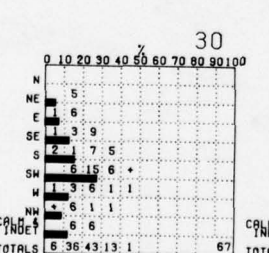


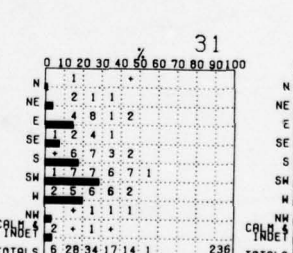


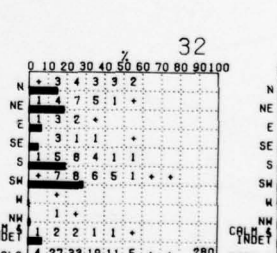
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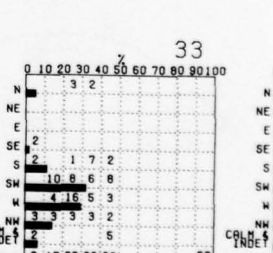
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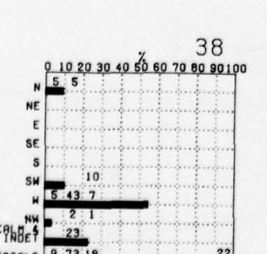






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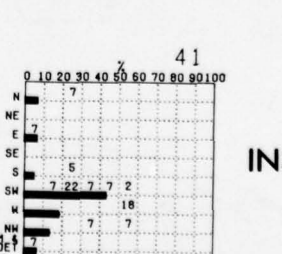


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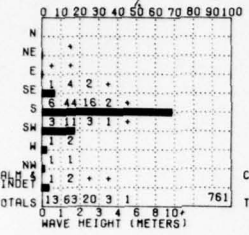
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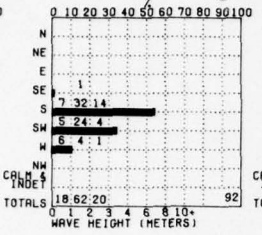


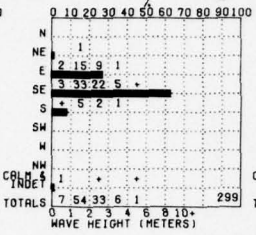
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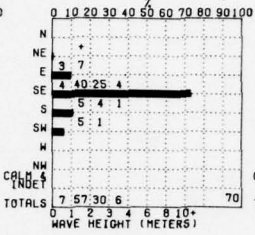
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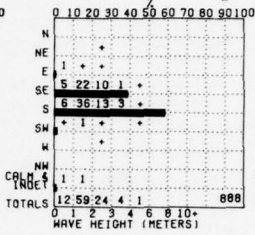
Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

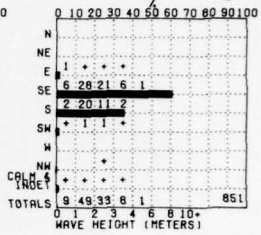
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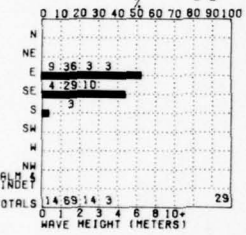
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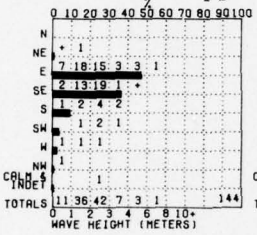
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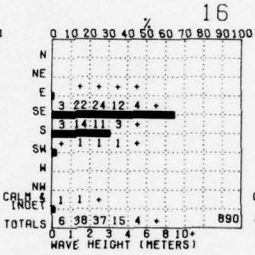
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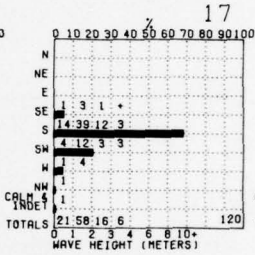
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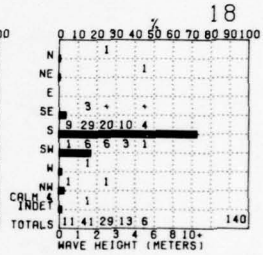
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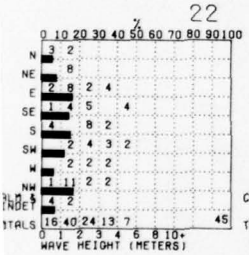
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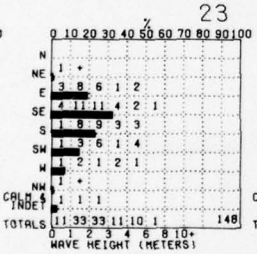
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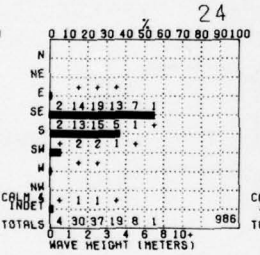
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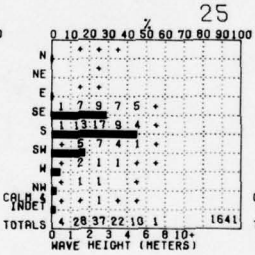
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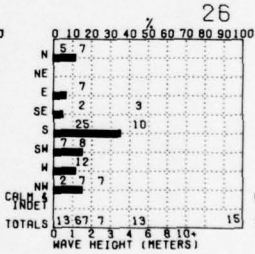
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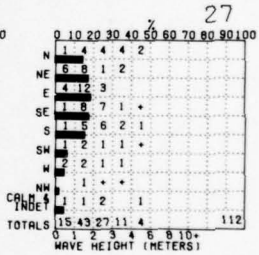
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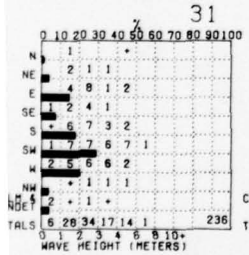
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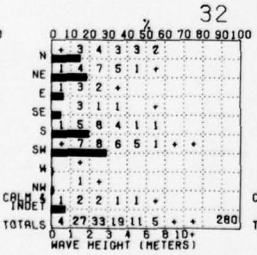
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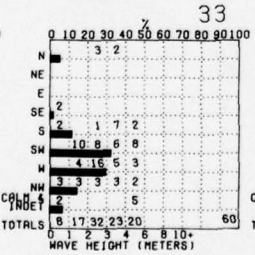
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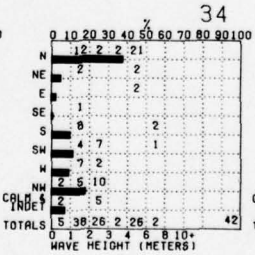
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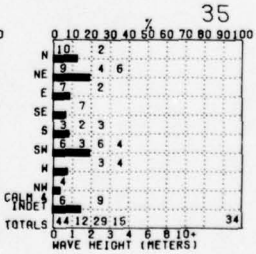
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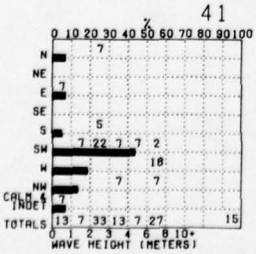
35


36

INSUFFICIENT DATA

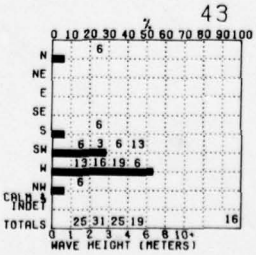
40

INSUFFICIENT DATA

41


42

INSUFFICIENT DATA

43


44

INSUFFICIENT DATA

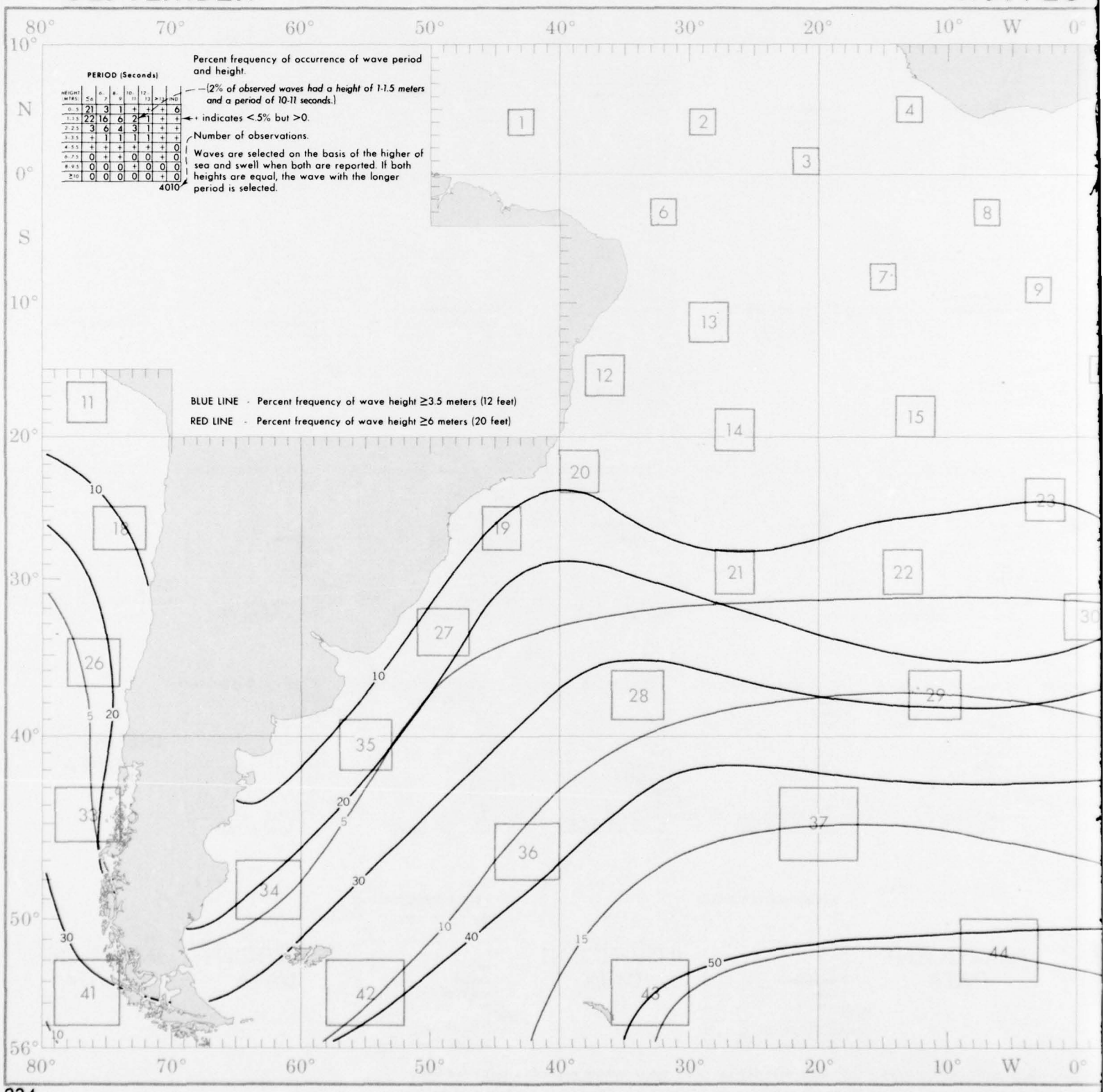
45

INSUFFICIENT DATA

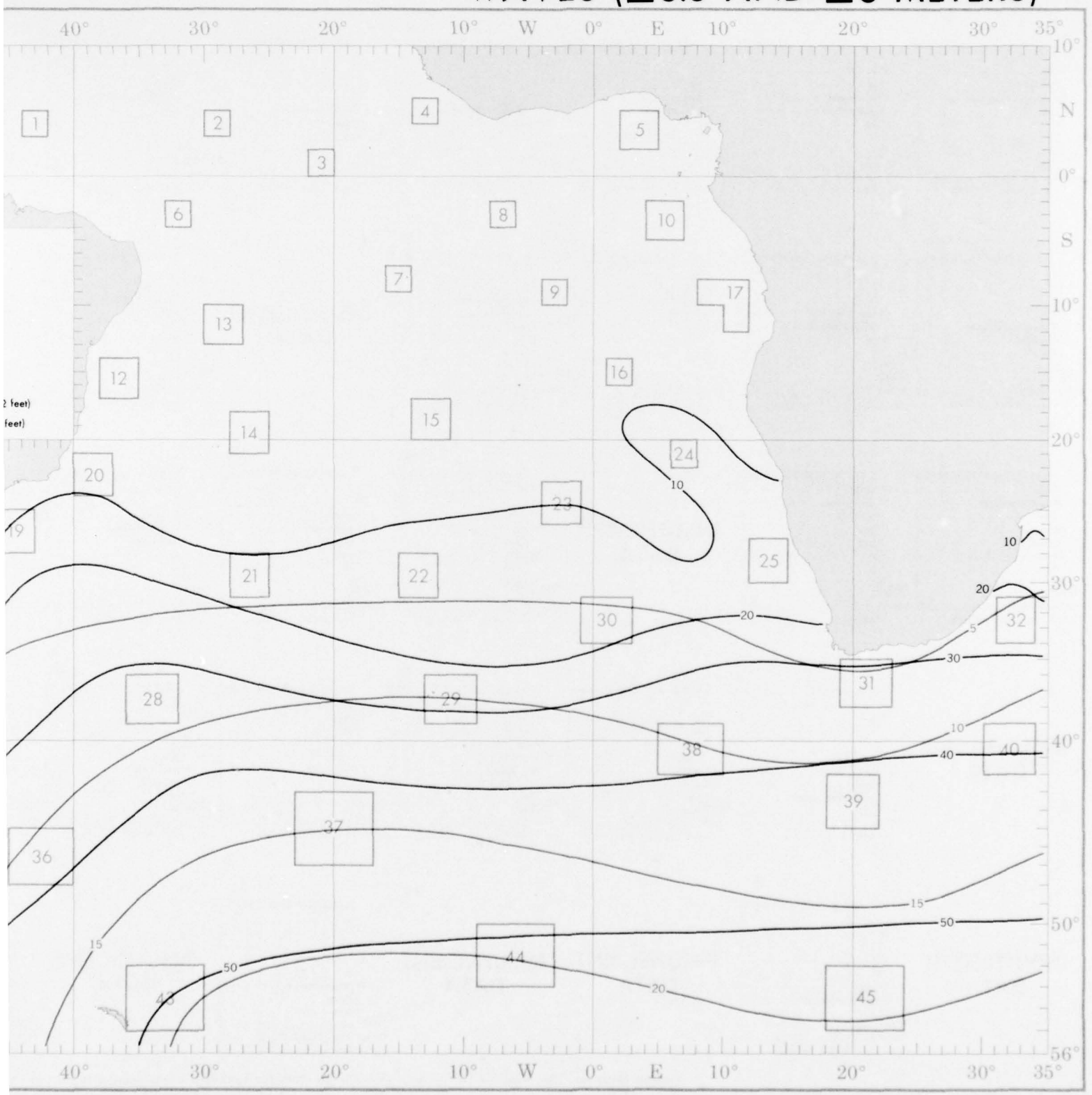
objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

SEPTEMBER

WAVES



WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	1	0	0	0	0	2
1-1.5	24	24	7	1	0	0	3
2-2.5	4	7	6	2	0	0	1
3-3.5	0	1	1	+	0	0	0
4-5.5	0	+	0	0	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

275

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	+	0	0	6
1-1.5	21	22	8	0	1	0	10
2-2.5	3	10	2	1	0	0	2
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

221

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	4	1	0	0	0	0
1-1.5	32	22	9	0	3	0	0
2-2.5	3	3	8	1	0	0	1
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

79

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	4
1-1.5	23	20	7	2	2	1	7
2-2.5	5	6	5	1	1	+	1
3-3.5	+	1	1	+	0	0	+
4-5.5	0	+	0	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

774

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	3	2	0	0	0	2
1-1.5	18	17	13	6	1	1	4
2-2.5	5	5	4	2	0	0	2
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

96

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	0	0	0	0	0
1-1.5	18	21	7	+	+	0	
2-2.5	6	16	6	2	1	+	
3-3.5	+	3	2	1	+	0	
4-5.5	0	+	0	0	0	0	
6-7.5	0	0	0	0	0	0	
8-9.5	0	0	0	0	0	0	
≥10	0	0	0	0	0	0	

302

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	3	3	0	0	0	6
1-1.5	14	22	6	3	6	1	3
2-2.5	1	1	1	1	1	1	0
3-3.5	0	1	0	0	0	0	0
4-5.5	0	1	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

139

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	0	0	0	0	3
1-1.5	21	18	8	1	3	1	2
2-2.5	6	6	7	5	1	2	1
3-3.5	0	1	1	1	0	1	1
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

155

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	0	+	0	0	2
1-1.5	29	21	5	1	+	+	6
2-2.5	3	8	6	1	+	1	1
3-3.5	1	+	+	1	0	+	+
4-5.5	0	0	0	0	+	0	0
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

965

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	0	0	0	0	0	0
1-1.5	34	24	7	0	3	0	0
2-2.5	0	10	3	0	0	0	0
3-3.5	0	0	0	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

29

INSUFFICIENT DATA

14

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	0	0	0	0	
1-1.5	16	12	6	1	0	0	
2-2.5	5	10	12	8	1	3	
3-3.5	1	1	1	1	2	0	
4-5.5	1	1	1	0	0	0	
6-7.5	0	0	1	0	0	0	
8-9.5	0	0	0	0	0	0	
≥10	0	0	0	0	0	0	

145

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	0	0	0	1
1-1.5	17	21	4	0	+	+	2
2-2.5	4	12	7	+	1	1	3
3-3.5	3	4	3	4	1	0	+
4-5.5	0	0	2	+	0	0	1
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

226

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	1	0	0	1
1-1.5	22	16	8	1	1	0	3
2-2.5	8	11	10	2	3	0	4
3-3.5	0	1	1	1	0	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	1	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

INSUFFICIENT DATA

21

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	4	0	0	0	0	4
1-1.5	16	16	4	2	0	0	2
2-2.5	2	4	11	2	2	2	0
3-3.5	0	0	11	0	2	0	0
4-5.5	0	2	0	2	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

45

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	0	0	0	0	1
1-1.5	5	16	3	5	1	0	3
2-2.5	6	7	7	8	0	1	3
3-3.5	0	3	5	1	2	1	0
4-5.5	1	2	3	0	2	2	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	1	+	0	0	1
1-1.5	10	8	6	1	1	+	3
2-2.5	7	11	10	4	2	1	3
3-3.5	2	7	5	3	2	+	1
4-5.5	1	2	3	1	+	1	1
6-7.5	0	+	+	+	0	+	+
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

988

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	30	35	0	0	0	0	0
2-2.5	5	18	0	3	0	0	0
3-3.5	3	3	0	3	0	0	0
4-5.5	0	0	0	3	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

40

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	1
1-1.5	6	18	1	3	0	0	7
2-2.5	4	12	13	6	0	0	7
3-3.5	0	4	1	3	3	1	0
4-5.5	0	0	0	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

68

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	3
1-1.5	12	8	3	+	1	0	2
2-2.5	8	9	10	3	2	0	2
3-3.5	2	3	4	5	2	1	+
4-5.5	1	1	5	3	2	1	+
6-7.5	0	0	1	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

237

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	+	0	0	0	1
1-1.5	9	8	3	1	1	0	4
2-2.5	4	15	5	4	1	0	4
3-3.5	0	7	7	2	1	1	1
4-5.5	2	2	4	1	1	1	1
6-7.5	0	1	1	1	+	0	1
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	+	0	0	0

280

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	2	2	0	0	0	2
1-1.5	5	0	7	3	0	0	2
2-2.5	2	3	13	13	0	0	0
3-3.5	7	3	2	5	5	2	0
4-5.5	0	7	2	0	3	3	5
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

61

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	7
1-1.5	7	0	0	0	0	0	0
2-2.5	7	0	20	7	0	0	0
3-3.5	0	7	0	0	7	0	0
4-5.5	0	0	7	0	0	0	0
6-7.5	0	0	7	7	13	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted wher

HT

SEPTEMBER

4

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	4
1-1.5	23	20	7	2	2	1	7
2-2.5	5	6	5	1	1	+	1
3-3.5	+	1	1	+	0	0	+
4-5.5	0	+	0	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

774

5

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	3	2	0	0	0	2
1-1.5	18	17	13	6	1	1	4
2-2.5	5	5	4	2	0	0	2
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

96

6

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	+	0	0	0	0	2
1-1.5	18	21	7	+	+	0	7
2-2.5	6	16	6	2	1	+	2
3-3.5	+	3	2	1	+	0	0
4-5.5	0	+	0	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

302

7

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	0
1-1.5	29	24	0	1	1	1	0
2-2.5	4	17	7	0	1	0	0
3-3.5	1	0	0	1	1	1	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

70

8

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	3
1-1.5	19	19	8	2	2	1	7
2-2.5	7	7	6	2	1	1	1
3-3.5	1	1	1	1	+	+	0
4-5.5	0	+	+	0	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

898

9

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	+	1	0	0	2
1-1.5	15	16	7	2	2	+	7
2-2.5	9	11	7	3	2	+	1
3-3.5	+	3	3	1	+	0	+
4-5.5	0	+	+	0	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

857

13

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	0	0	0	0	0	0
1-1.5	34	24	7	0	3	0	0
2-2.5	0	10	3	0	0	0	0
3-3.5	0	0	0	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

29

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	0	0	0	0	1
1-1.5	16	12	6	1	0	0	1
2-2.5	5	10	12	8	1	3	2
3-3.5	1	1	1	1	2	0	0
4-5.5	1	1	1	0	0	0	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

16

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	0	+	0	0	2
1-1.5	11	12	6	2	1	+	5
2-2.5	8	13	9	2	2	1	2
3-3.5	2	5	3	2	1	1	1
4-5.5	1	1	1	1	1	+	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

895

17

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	1	0	1	0	0	1
1-1.5	15	21	6	5	1	0	2
2-2.5	0	3	10	1	0	0	0
3-3.5	0	2	0	2	1	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

136

18

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	0	0	0	0	1
1-1.5	18	13	6	0	1	0	2
2-2.5	3	11	7	3	2	1	1
3-3.5	1	6	2	2	0	1	0
4-5.5	0	3	1	0	0	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

144

22

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	4	0	0	0	0	4
1-1.5	16	16	4	2	0	0	2
2-2.5	2	4	11	2	2	2	0
3-3.5	0	0	11	0	2	0	0
4-5.5	0	2	0	2	2	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

45

23

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	0	0	0	0	1
1-1.5	5	16	3	5	1	0	3
2-2.5	6	7	7	8	0	1	3
3-3.5	0	3	5	1	2	1	0
4-5.5	1	2	3	0	2	2	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

24

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	1	+	0	0	1
1-1.5	10	8	6	1	1	+	3
2-2.5	7	11	10	4	2	1	3
3-3.5	2	7	5	3	2	+	1
4-5.5	1	2	3	1	+	1	1
6-7.5	0	+	+	0	+	+	+
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

988

25

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	+	0	0	0	1
1-1.5	11	7	4	1	1	0	3
2-2.5	5	12	9	5	1	+	3
3-3.5	1	7	6	4	2	+	2
4-5.5	+	2	4	2	1	+	+
6-7.5	0	+	+	+	0	+	+
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1648

26

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	0	0	0	0
1-1.5	33	7	27	0	0	0	0
2-2.5	0	0	7	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	13	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

27

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	0	0	0	0	0	1
1-1.5	14	19	6	1	0	0	2
2-2.5	8	3	10	1	1	1	4
3-3.5	3	5	2	1	0	0	0
4-5.5	0	1	2	2	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

113

31

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	3
1-1.5	12	8	3	+	1	0	2
2-2.5	8	9	10	3	2	0	2
3-3.5	2	3	4	5	2	1	+
4-5.5	1	1	5	3	2	1	+
6-7.5	0	0	1	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

237

32

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	+	0	0	0	1
1-1.5	9	8	3	1	1	0	4
2-2.5	4	15	5	4	1	0	4
3-3.5	0	7	7	2	1	1	1
4-5.5	2	2	4	1	1	1	1
6-7.5	0	1	1	1	+	0	1
8-9.5	0	0	+	0	0	0	0
≥10	0	0	0	+	0	0	0

280

33

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	2	2	0	0	0	2
1-1.5	5	0	7	3	0	0	2
2-2.5	2	3	13	13	0	0	0
3-3.5	7	3	2	5	5	2	0
4-5.5	0	7	2	0	3	3	5
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

61

34

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	9
1-1.5	16	9	2	2	0	0	7
2-2.5	13	2	4	0	0	0	4
3-3.5	0	0	0	2	0	0	0
4-5.5	0	16	0	0	4	0	4
6-7.5	0	2	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

45

35

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	27	11	0	0	0	0	11
1-1.5	5	5	0	0	0	0	0
2-2.5	3	11	0	3	0	0	11
3-3.5	0	0	3	0	0	0	11
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

37

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	0	0	0	0	0	7
1-1.5	7	0	0	0	0	0	0
2-2.5	7	0	20	7	0	0	0
3-3.5	0	7	0	0	7	0	0
4-5.5	0	0	7	0	0	0	0
6-7.5	0	0	7	7	13	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

15

42

INSUFFICIENT DATA

43

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	19	6	0	0	0	0
2-2.5	6	6	19	0	0	0	0
3-3.5	0	0	19	6	0	0	0
4-5.5	0	0	6	13	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

16

44

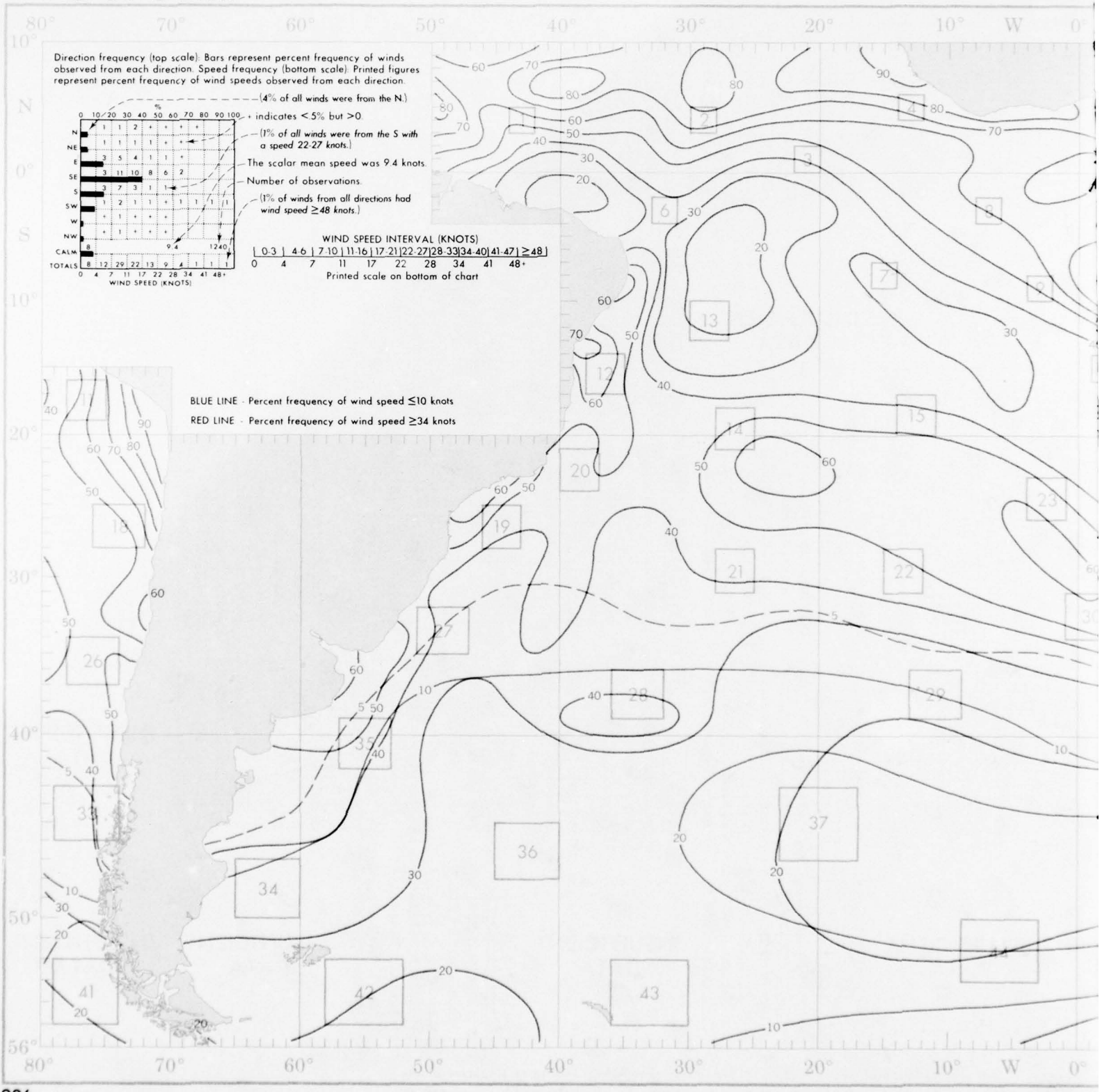
INSUFFICIENT DATA

45

INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

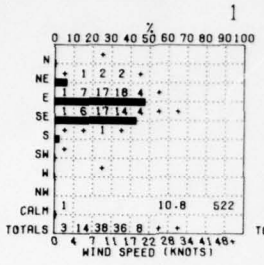
OCTOBER

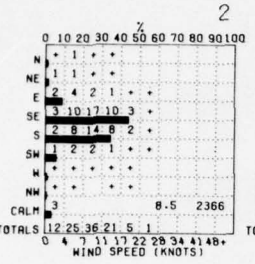

Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates <.5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

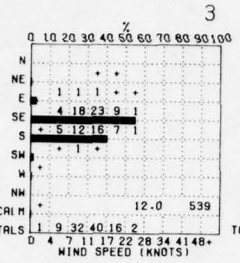
SURFACE WINDS

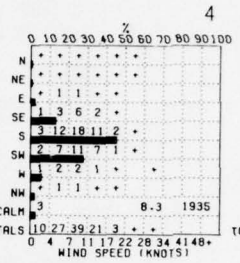


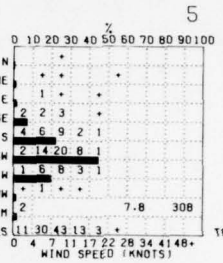
WIND DIRECTION AND SPEED

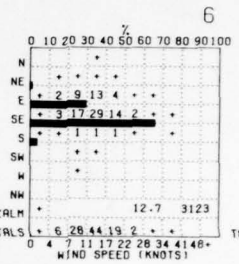


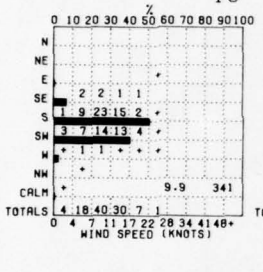


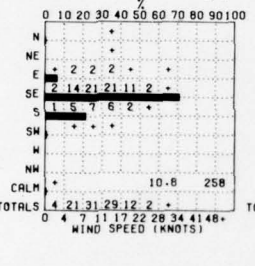


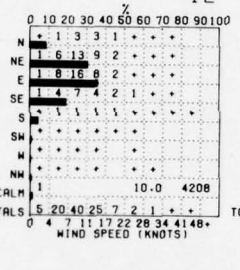


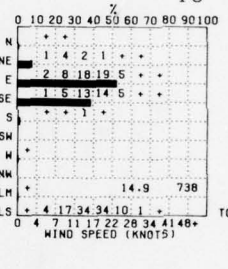


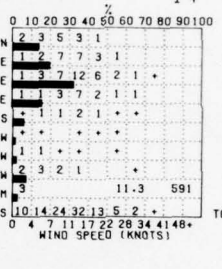


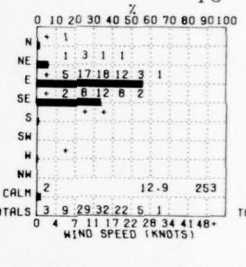


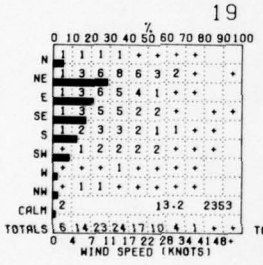


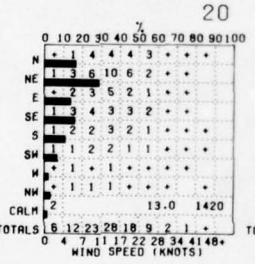


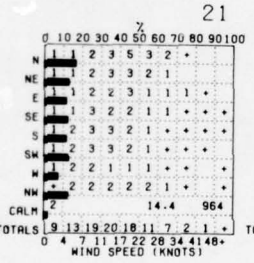


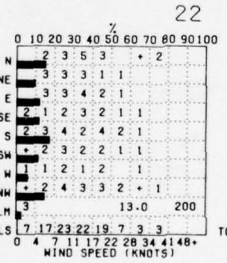


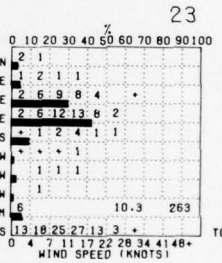


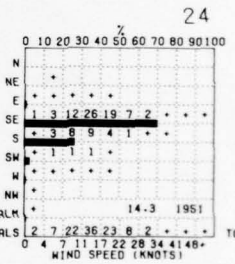


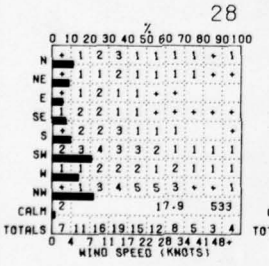


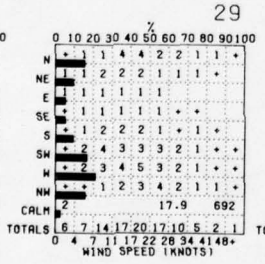


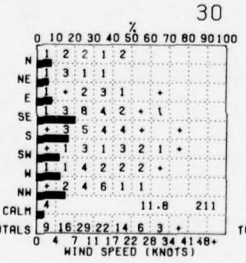


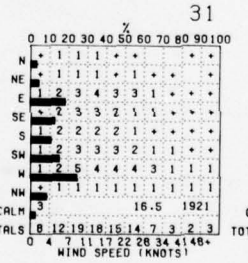


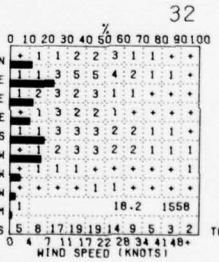


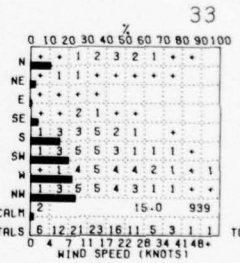






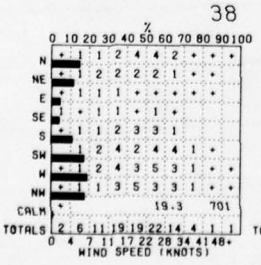


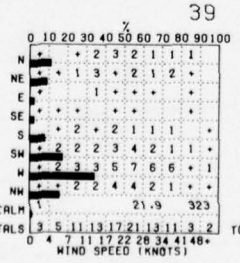


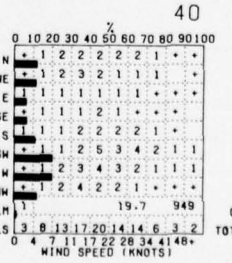


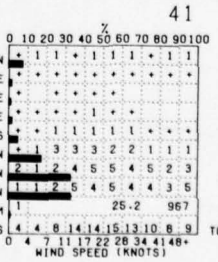
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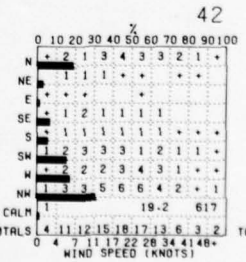
INSUFFICIENT DATA







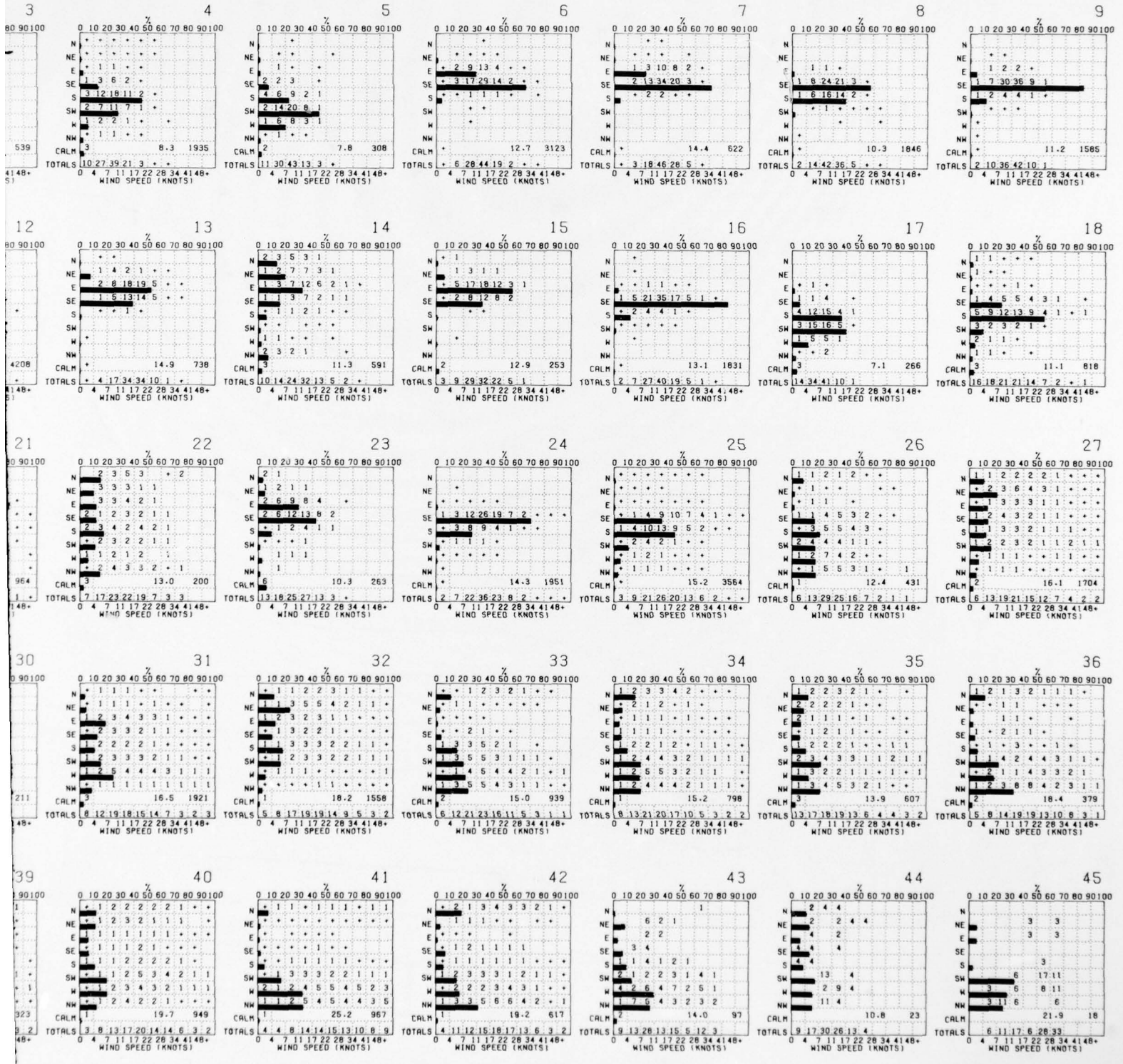




Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

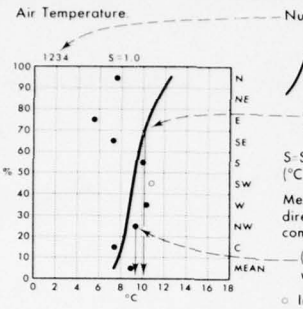
SPEED

OCTOBER



ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER



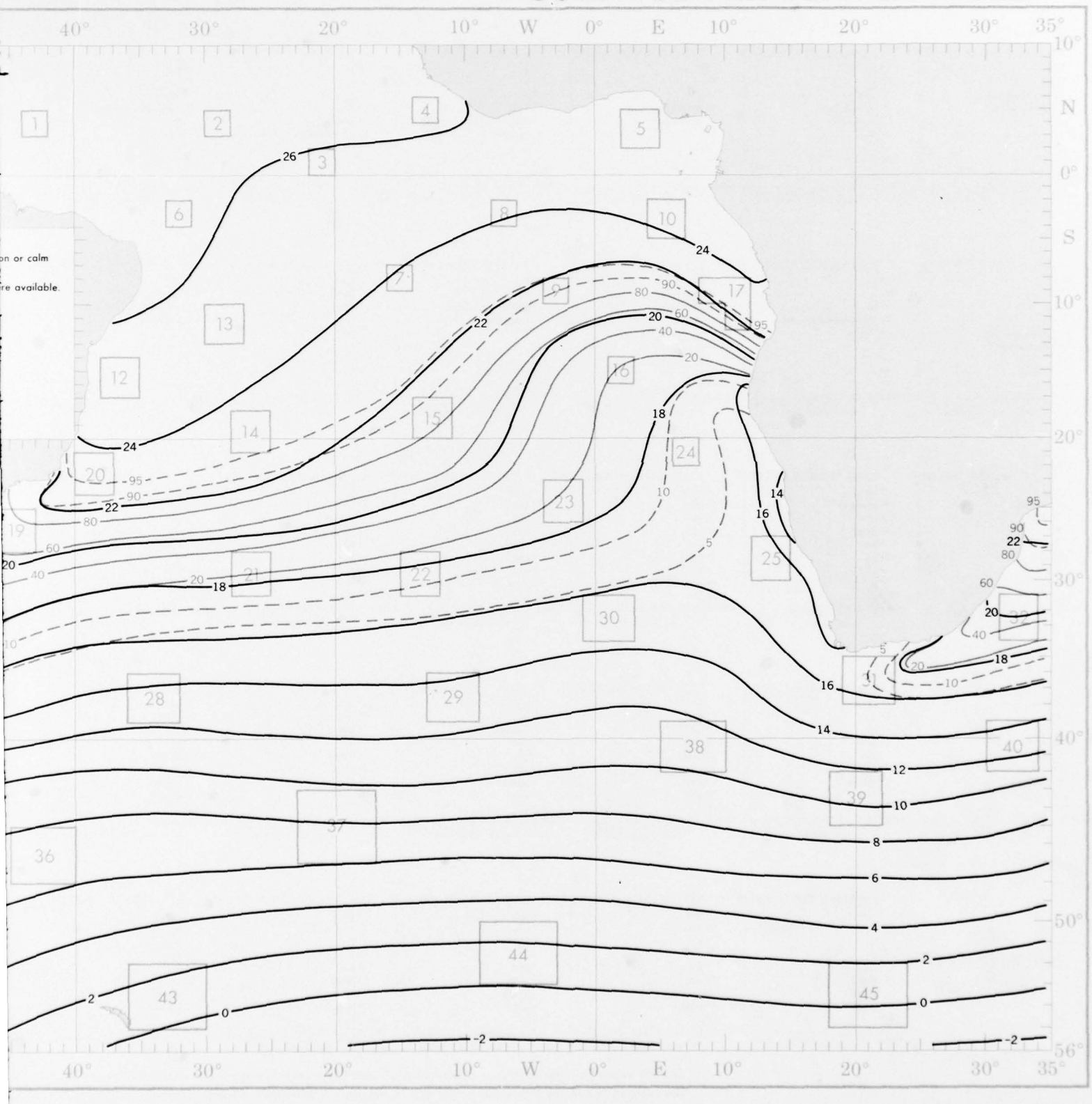
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.

The mean temperature is omitted when less than 10 observations for a direction or calm were available.

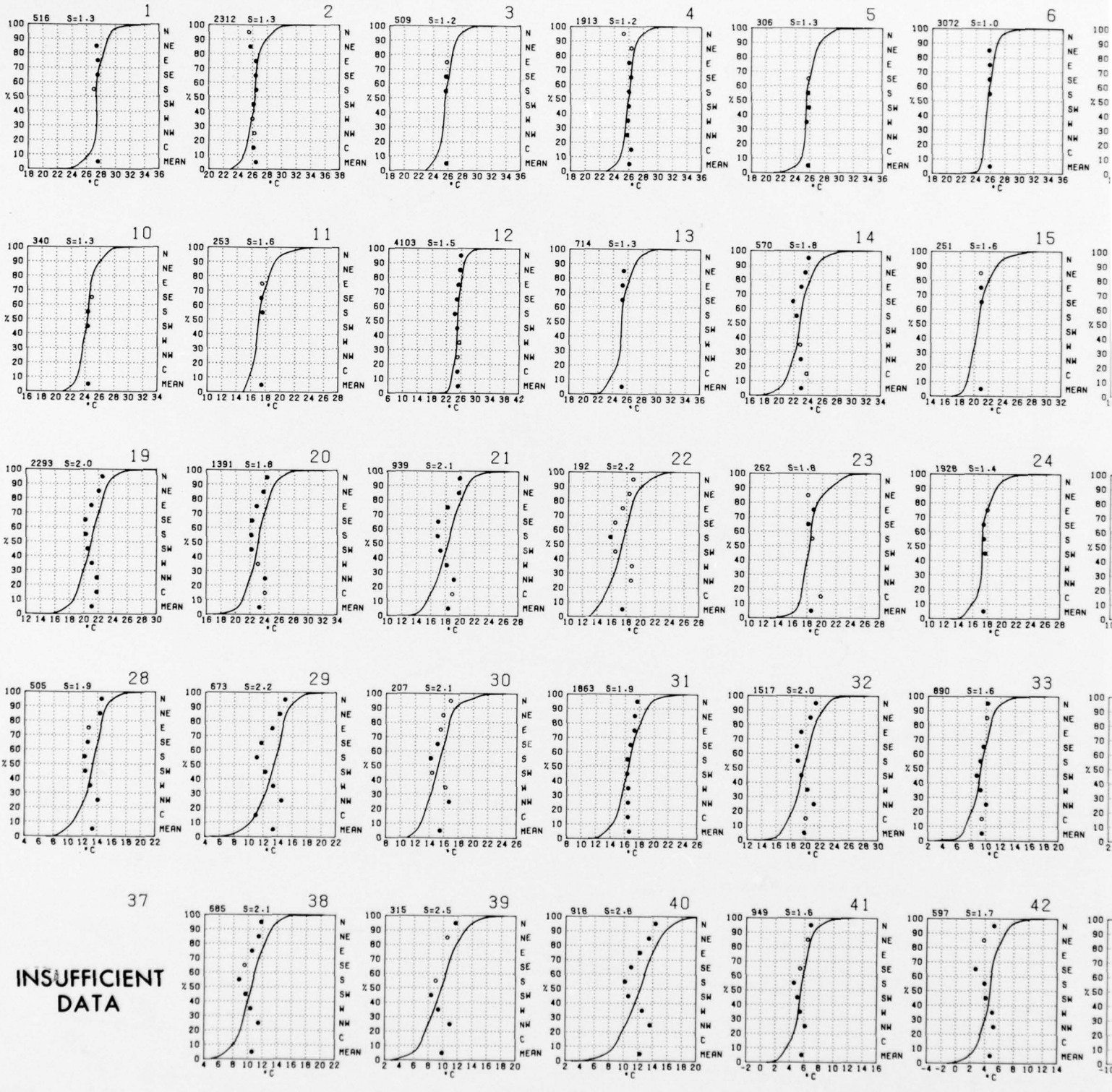
BLACK LINE - Mean air temperature (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

SURFACE AIR TEMPERATURE

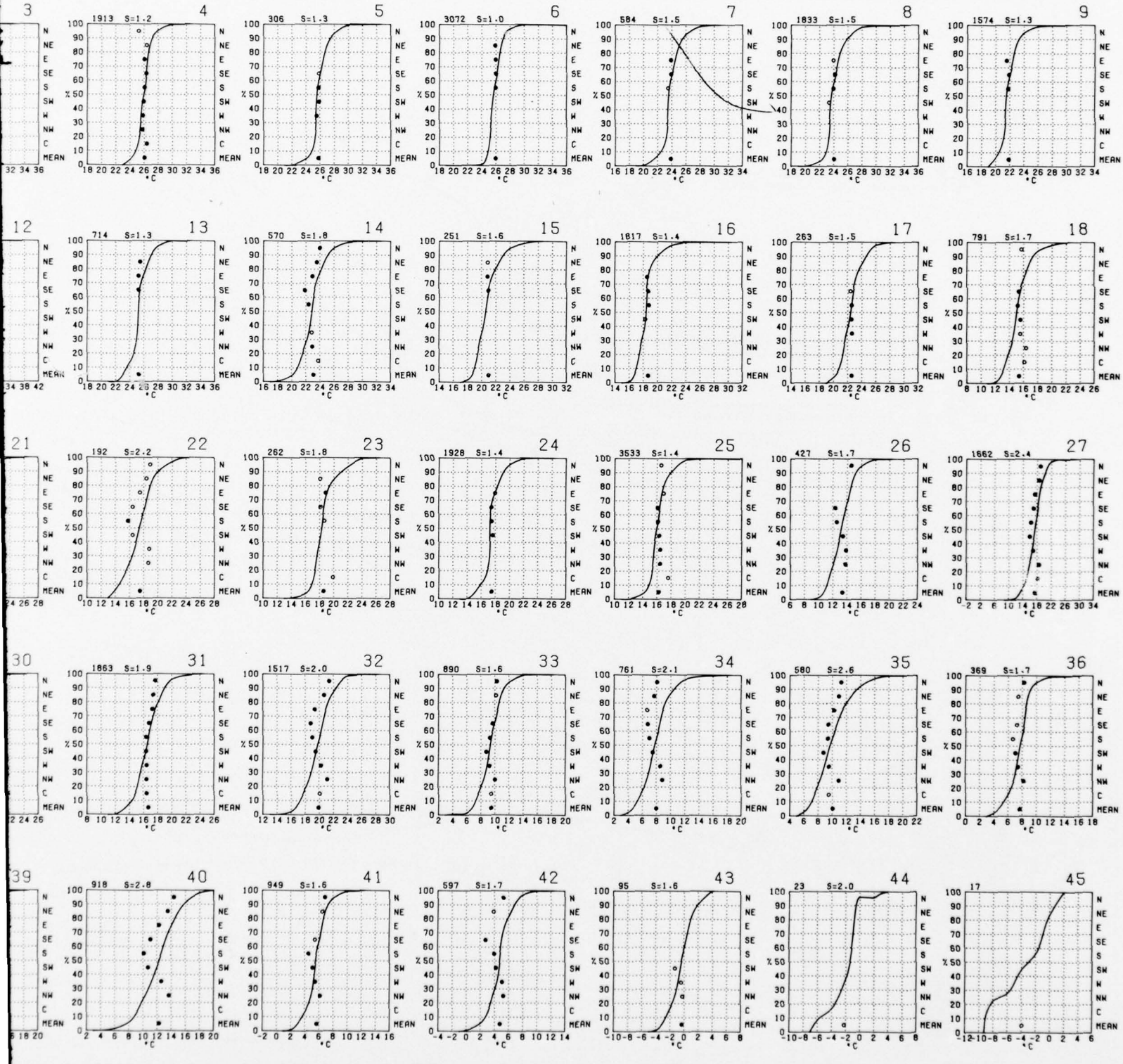


SURFACE AIR TEMPERATURE



INSUFFICIENT DATA

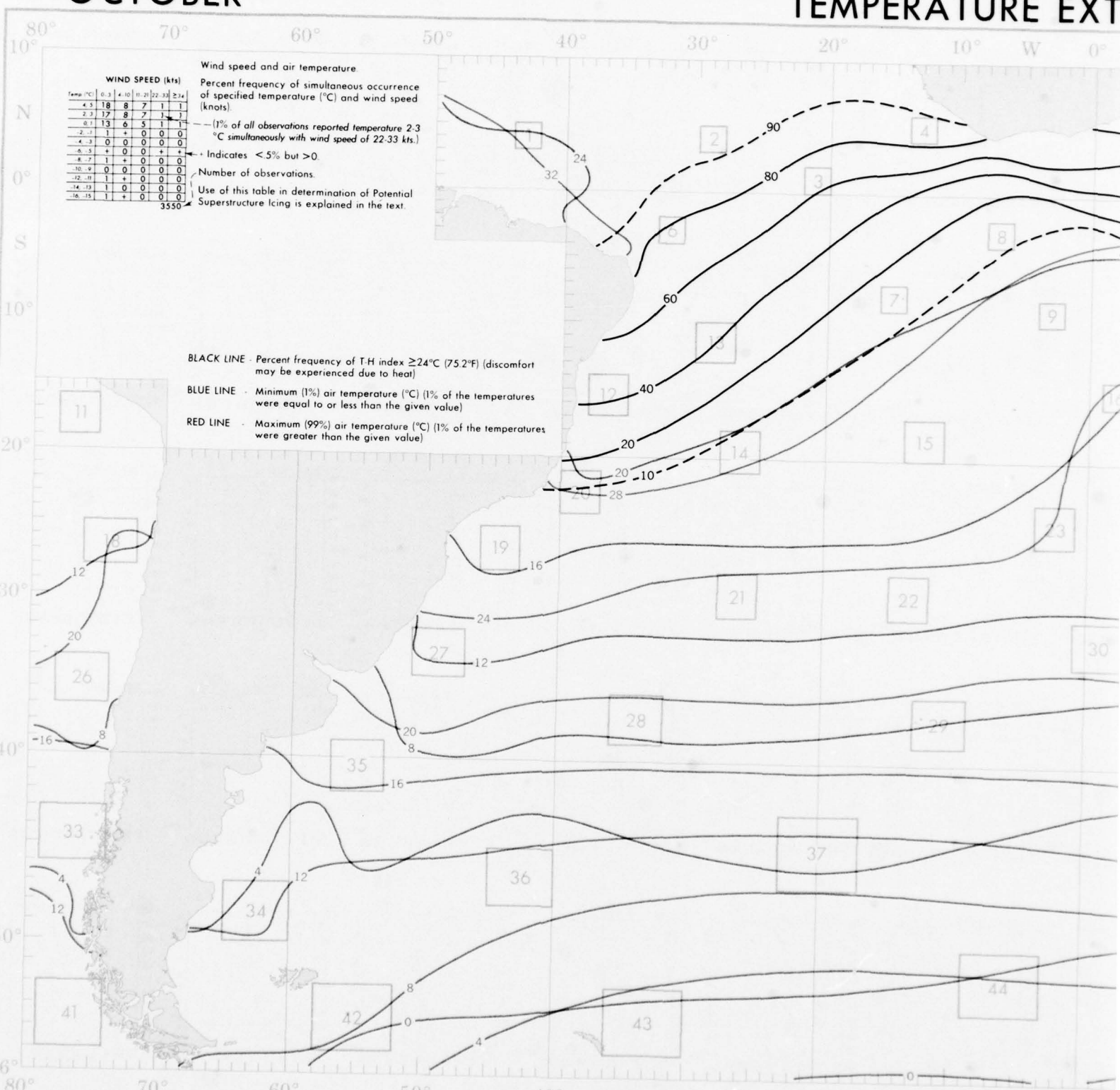
Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi



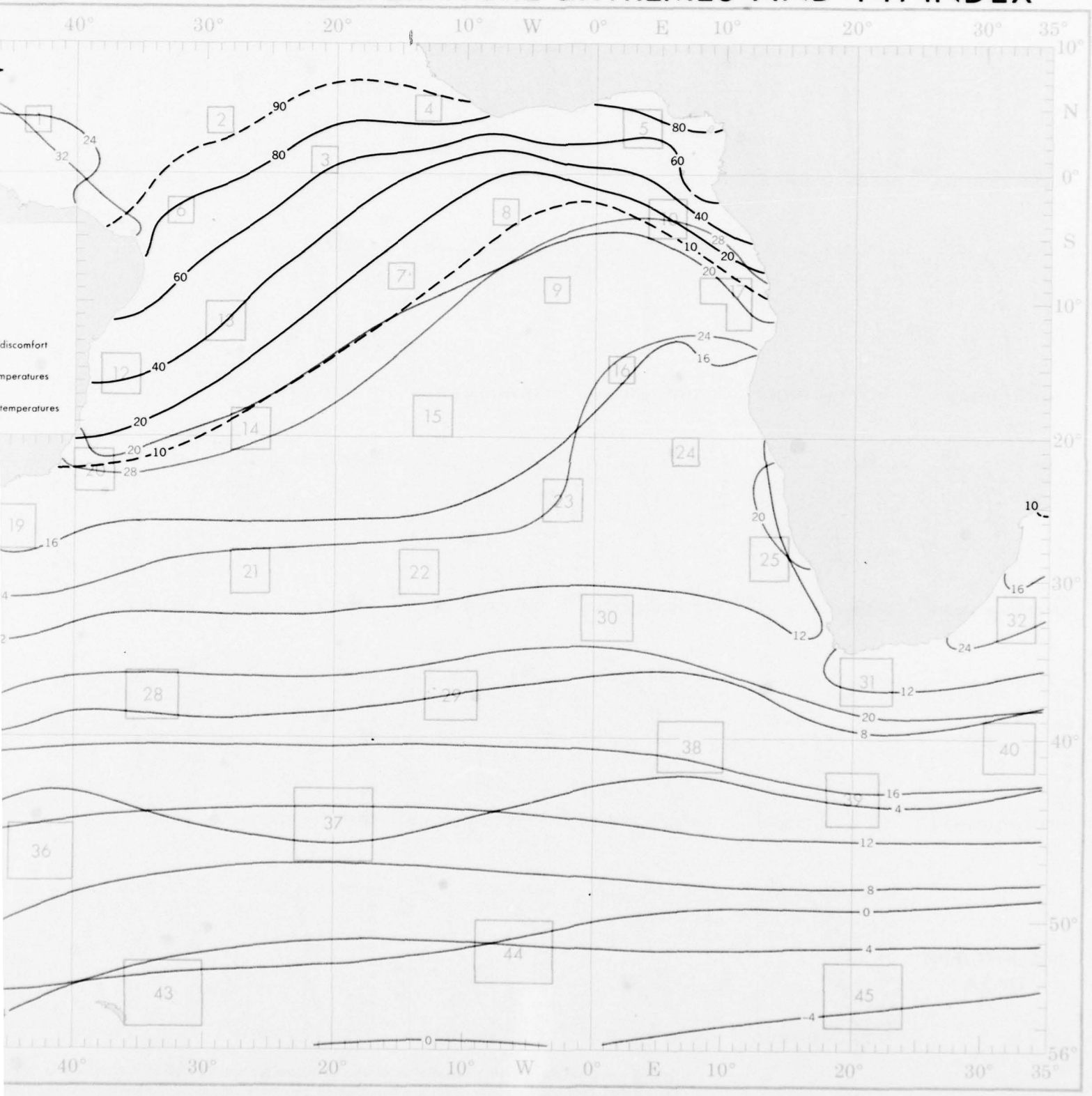
resent the objective compilation of available data for specified areas without regard to suspected biases.
n analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER

TEMPERATURE EXT



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

1

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	3	3	0	0
28.29	1	20	20	+	0
26.27	3	25	20	+	0
24.25	0	2	1	0	0
22.23	0	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

518

2

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	1	1	0	0
28.29	2	10	4	+	0
26.27	6	39	17	+	0
24.25	3	10	4	+	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2325

3

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	+	6	4	0	0
26.27	0	21	27	+	0
24.25	+	16	22	1	0
22.23	0	1	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

509

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	+	0	0
28.29	2	7	2	+	0
26.27	8	41	15	+	0
24.25	2	15	6	+	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1959

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	0	0	0	0
28.29	3	6	1	0	0
26.27	4	41	7	0	0
24.25	5	24	8	+	0
22.23	0	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

307

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	+	0	0
30.31	0	+	+	0	0
28.29	+	2	4	+	0
26.27	+	22	44	2	+
24.25	+	10	14	1	+
22.23	0	0	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

3072

10

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	1	2	0	0
26.27	1	8	9	0	0
24.25	1	35	19	1	0
22.23	2	13	7	0	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

341

11

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	2	+	0	0
20.21	0	6	3	+	0
18.19	2	17	9	1	0
16.17	2	24	25	1	0
14.15	1	2	4	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

254

12

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	+	0	0
30.31	+	1	+	0	0
28.29	+	4	2	+	0
26.27	2	20	11	+	0
24.25	3	31	16	2	+
22.23	+	3	3	1	+
20.21	+	+	+	+	0
18.19	0	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4117

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	0	2	3	+	0
26.27	+	9	23	3	+
24.25	0	10	37	6	+
22.23	0	1	4	1	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

714

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	0	0
28.29	1	1	+	0	0
26.27	1	2	2	+	0
24.25	2	12	14	2	0
22.23	5	18	20	3	+
20.21	1	4	8	2	0
18.19	0	1	1	0	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

571

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	1	1	0	0
24.25	0	1	2	0	0
22.23	2	10	12	+	0
20.21	1	22	30	3	0
18.19	+	4	8	2	0
16.17	0	0	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

251

19

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	+	+	0	0
26.27	+	1	+	+	0
24.25	1	4	3	1	+
22.23	3	13	14	4	+
20.21	1	13	15	5	+
18.19	1	6	7	3	+
16.17	+	1	1	1	+
14.15	0	0	+	+	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2296

20

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	+	1	1	0	0
26.27	1	4	3	1	+
24.25	2	12	17	4	+
22.23	2	14	20	4	+
20.21	1	5	6	2	1
18.19	+	+	1	+	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1392

21

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	1	+	0	0
22.23	1	1	3	1	0
20.21	2	8	11	5	1
18.19	3	10	13	7	1
16.17	3	9	8	4	1
14.15	1	2	3	2	+
12.13	+	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

939

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	1	3	1	0	0
20.21	1	2	9	1	0
18.19	1	16	15	2	2
16.17	3	13	10	5	1
14.15	2	5	6	2	0
12.13	1	1	1	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

193

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	+	0	0
22.23	2	2	3	0	0
20.21	2	6	5	+	0
18.19	9	25	22	2	0
16.17	1	9	11	1	0
14.15	0	0	0	0	0
12.13	0	+	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

264

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	+	0	0
22.23	+	1	1	0	0
20.21	+	2	4	1	0
18.19	1	10	20	4	+
16.17	1	15	33	6	+
14.15	0	1	2	1	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1935

28

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	1	0	+
16.17	1	2	4	1	1
14.15	3	9	11	12	5
12.13	3	12	12	6	3
10.11	0	3	5	3	1
8.9	+	1	1	+	2
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

505

29

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	+	+	1	1	+
16.17	+	2	5	4	1
14.15	2	6	16	11	3
12.13	2	9	10	6	1
10.11	1	3	4	3	2
8.9	+	1	1	1	+
6.7	1	+	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

680

30

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	+	0	0
20.21	1	1	1	0	0
18.19	1	3	2	+	0
16.17	3	16	17	3	0
14.15	1	17	9	3	+
12.13	1	5	5	2	0
10.11	+	+	1	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

207

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	1	+	+	+
20.21	1	2	1	1	+
18.19	2	8	9	5	2
16.17	4	13	14	8	3
14.15	1	6	7	5	3
12.13	+	1	1	1	+
10.11	+	0	0	+	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1866

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	+
24.25	+	1	1	1	+
22.23	1	5	7	5	2
20.21	2	9	15	8	4
18.19	2	7	11	6	3
16.17	1	3	4	2	1
14.15	0	+	+	+	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1527

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	0	0	0
14.15	+	1	+	0	0
12.13	+	3	4	1	+
10.11	2	13	19	8	1
8.9	2	12	14	7	3
6.7	+	3	2	1	1
4.5	0	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

890

37

INSUFFICIENT DATA

38

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	0	+	0
18.19	0	0	0	+	0
16.17	0	0	+	+	+
14.15	+	1	3	3	1
12.13	1	5	9	8	2
10.11	1	8	14	13	2
8.9	+	3	8	9	1
6.7	0	1	2	2	1
4.5	0	+	+	1	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

685

39

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	0	+	1	0
14.15	+	+	2	3	1
12.13	1	3	7	7	3
10.11	1	4	9	8	4
8.9	+	5	10	12	4
6.7	0	3	2	3	4
4.5	0	+	+	1	1
2.3	0	1	+	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

315

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	0	+	2	1	+
16.17	+	1	4	3	2
14.15	1	3	7	5	2
12.13	1	6	11	8	3
10.11	1	5	7	6	3
8.9	+	3	3	4	1
6.7	+	+	1	1	1
4.5	0	+	+	+	+
2.3	0	0	0	+	0
0.1	0	0	0	0	0

918

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	0	+	0
10.11	0	+	+	+	0
8.9	1	3	4	3	3
6.7	1	4	12	13	11
4.5	2	4	10	10	12
2.3	+	1	1	2	2
0.1	0	0	0	+	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

949

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	+	1	+	0	0
8.9	1	1	2	1	0
6.7	0	5	11	9	4
4.5	2	11	15	15	5
2.3	1	4	5	4	1
0.1	0	+	+	2	1
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

597

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

MPERATURE

OCTOBER

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	+	0	0
28.29	2	7	2	+	0
26.27	8	41	15	+	0
24.25	2	15	6	+	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1959

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	0	0	0	0
28.29	3	6	1	0	0
26.27	4	41	7	0	0
24.25	5	24	8	+	0
22.23	0	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

307

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	+	0	0
30.31	0	+	+	0	0
28.29	+	2	4	+	0
26.27	+	22	44	2	+
24.25	+	10	14	1	+
22.23	0	0	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

3072

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	0	0	0
28.29	0	1	1	0	0
26.27	+	3	9	1	0
24.25	0	7	33	2	0
22.23	0	10	29	2	0
20.21	0	+	3	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

584

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	+	0	0
30.31	0	+	+	0	0
28.29	+	1	+	0	0
26.27	+	8	5	0	0
24.25	1	25	21	+	0
22.23	1	21	14	+	0
20.21	0	+	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

1838

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	+	1	1	0	0
24.25	+	4	4	+	0
22.23	1	20	25	+	0
20.21	1	20	20	+	0
18.19	0	+	1	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1576

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	1	0	0
28.29	0	2	3	+	0
26.27	+	9	23	3	+
24.25	0	10	37	6	+
22.23	0	1	4	1	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

714

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	0	0	0
28.29	1	1	+	0	0
26.27	1	2	2	+	0
24.25	2	12	14	2	0
22.23	5	18	20	3	+
20.21	1	4	8	2	0
18.19	0	1	1	0	0
16.17	0	+	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

571

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	1	1	0	0
24.25	0	1	2	0	0
22.23	2	10	12	+	0
20.21	1	22	30	3	0
18.19	+	4	8	2	0
16.17	0	0	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

251

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	0	0	+	0	0
24.25	+	+	+	0	0
22.23	+	1	2	+	0
20.21	+	6	10	1	0
18.19	1	22	39	4	0
16.17	+	5	7	1	+
14.15	0	0	+	+	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1817

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	1	4	0	0	0
24.25	5	12	3	0	0
22.23	5	42	5	0	0
20.21	4	18	2	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

265

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	+	0	+	0
20.21	1	1	+	+	0
18.19	1	5	3	+	0
16.17	6	12	9	2	0
14.15	7	18	19	5	1
12.13	1	2	4	2	0
10.11	+	+	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

792

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	1	3	1	0	0
20.21	1	2	9	1	0
18.19	1	16	15	2	2
16.17	3	13	10	5	1
14.15	2	5	6	2	0
12.13	1	1	1	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

193

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	1	+	0	0
22.23	2	2	3	0	0
20.21	2	6	5	+	0
18.19	9	25	22	2	0
16.17	1	9	11	1	0
14.15	0	0	0	0	0
12.13	0	+	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

264

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	+	0	0
22.23	+	1	1	0	0
20.21	+	2	4	1	0
18.19	1	10	20	4	+
16.17	1	15	33	6	+
14.15	0	1	2	1	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1935

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	0	0	0
22.23	0	+	+	+	0
20.21	+	1	1	+	0
18.19	1	5	6	2	+
16.17	1	17	25	10	1
14.15	1	8	13	6	1
12.13	0	+	1	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

3549

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	1	+	0	+
16.17	2	6	4	1	0
14.15	2	14	13	3	+
12.13	2	15	20	5	1
10.11	0	6	5	1	0
8.9	0	+	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

427

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	+	+	+	+	0
22.23	+	1	1	+	+
20.21	1	6	6	4	+
18.19	2	10	13	5	1
16.17	2	9	9	6	2
14.15	1	3	5	3	2
12.13	+	2	1	+	1
10.11	0	0	+	+	+
8.9	0	0	+	0	0
6.7	0	0	0	0	0

1664

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	0	0	0
22.23	+	1	+	+	+
20.21	1	2	1	1	+
18.19	2	8	9	5	2
16.17	4	13	14	8	3
14.15	1	6	7	5	3
12.13	+	1	1	1	+
10.11	+	0	0	+	+
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

1866

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	+
24.25	+	1	1	1	+
22.23	1	5	7	5	2
20.21	2	9	15	8	4
18.19	2	7	11	6	3
16.17	1	3	4	2	1
14.15	0	+	+	+	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1527

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	0	0	0
14.15	+	1	+	0	0
12.13	+	3	4	1	+
10.11	2	13	19	8	1
8.9	2	12	14	7	3
6.7	+	3	2	1	1
4.5	0	0	+	+	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

890

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	0	0	0
16.17	0	+	+	0	0
14.15	0	+	1	0	0
12.13	1	2	2	+	0
10.11	2	5	6	1	+
8.9	2	12	14	6	2
6.7	3	12	11	5	3
4.5	1	2	3	2	2
2.3	0	+	+	0	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

761

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	+	+	+	+	0
16.17	+	1	1	+	+
14.15	1	4	2	2	+
12.13	2	6	6	1	+
10.11	3	9	10	2	1
8.9	4	12	12	4	3
6.7	3	5	2	1	3
4.5	0	+	1	0	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

580

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	0	+	0	0
12.13	0	+	1	0	0
10.11	1	1	5	2	4
8.9	3	11	17	13	3
6.7	2	9	11	7	3
4.5	0	1	4	2	2
2.3	0	0	+	+	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

369

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	0	+	2	1	+
16.17	+	1	4	3	2
14.15	1	3	7	5	2
12.13	1	6	11	8	3
10.11	1	5	7	6	3
8.9	+	3	3	4	1
6.7	+	+	1	1	1
4.5	0	+	+	+	+
2.3	0	0	0	+	0
0.1	0	0	0	0	0

918

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	0	+	0
10.11	0	+	+	+	0
8.9	1	3	4	3	3
6.7	1	4	12	13	11
4.5	2	4	10	10	12
2.3	+	1	1	2	2
0.1	0	0	0	+	+
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

949

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
10.11	+	1	+	0	0
8.9	1	1	2	1	0
6.7	0	5	11	9	4
4.5	2	11	15	15	5
2.3	1	4	5	4	1
0.1	0	+	+	2	1
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0

597

43

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
4.5	0	0	0	1	0
2.3	0	4	4	4	2
0.1	3	11	15	6	0
-2.-1	5	25	5	2	1
-4.-3	1	2	3	3	0
-6.-5	0	0	1	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0

95

44

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
2.3	0	4	0	0	0
0.1	0	0	0	0	0
-2.-1	4	30	35	4	0
-4.-3	4	4	0	0	0
-6.-5	0	4	4	0	0
-8.-7	0	4	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0
-18.-17	0	0	0	0	0

23

45

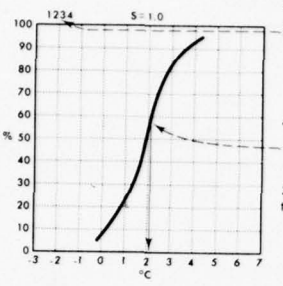
WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0.1	0	12	0	6	0
-2.-1	0	6	6	12	0
-4.-3	0	0	6	6	0
-6.-5	0	0	0	18	0
-8.-7	0	0	6	18	0
-10.-9	0	0	6	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0
-18.-17	0	0	0	0	0
-20.-19	0	0	0	0	0

17

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

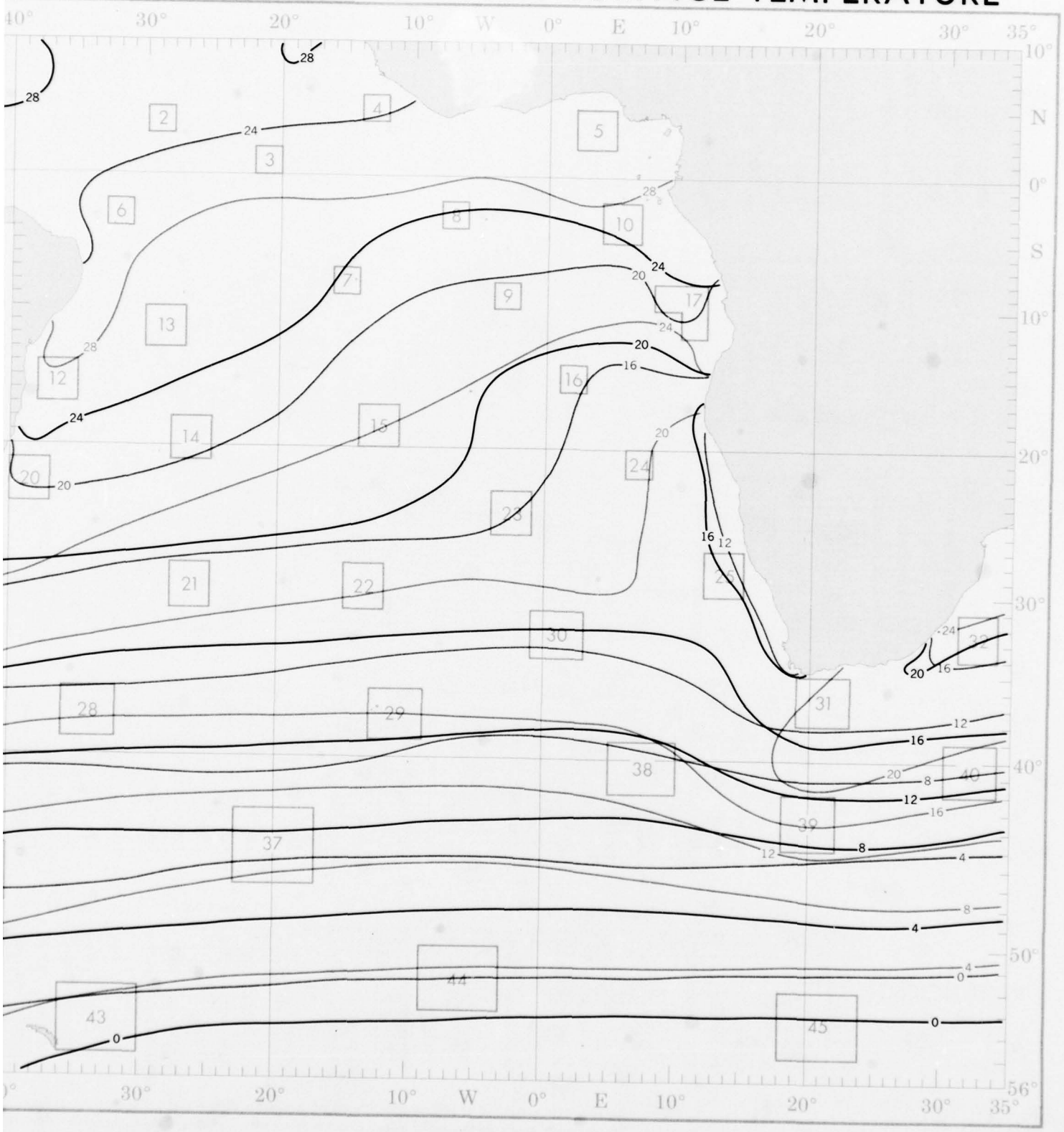
S - Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

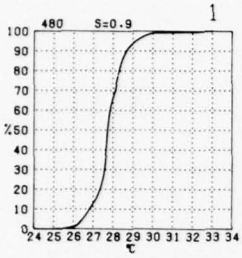
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

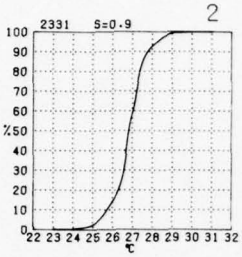
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

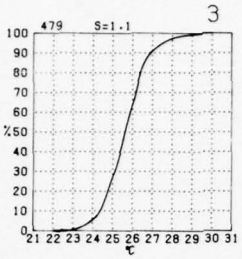
SEA SURFACE TEMPERATURE

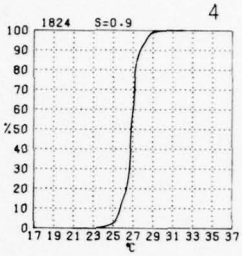


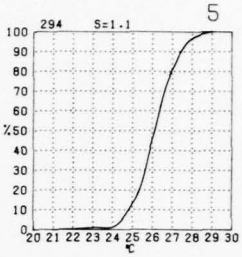
SEA SURFACE TEMPERATURE

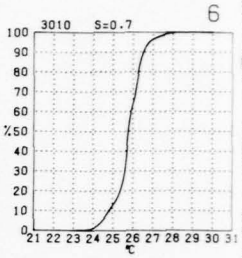


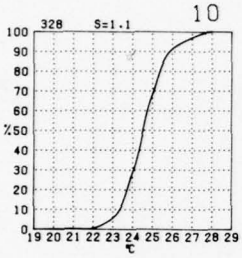


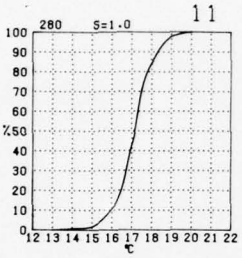


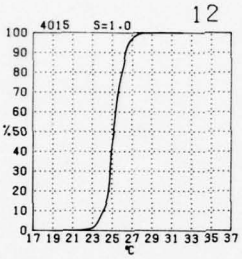


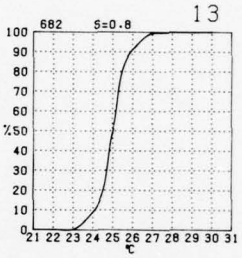


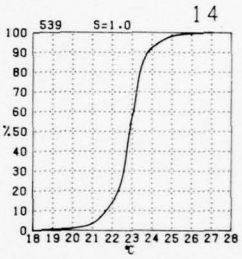


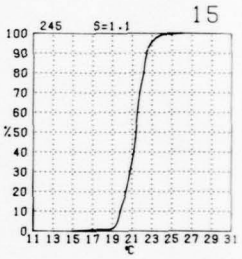


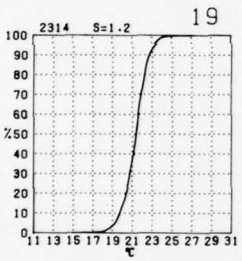


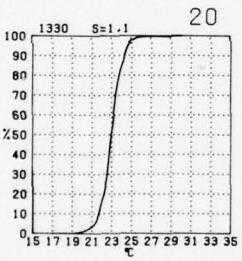


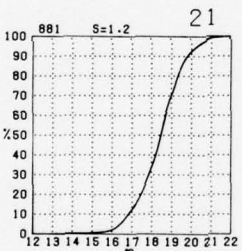


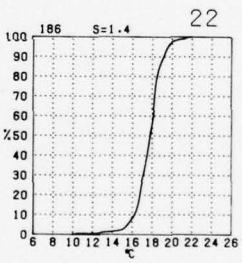


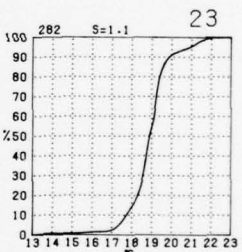


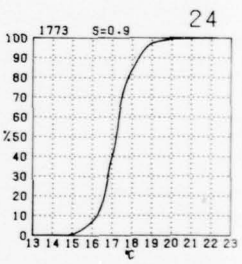


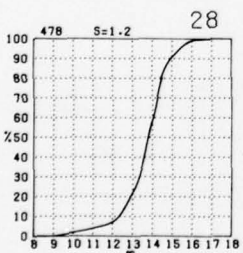


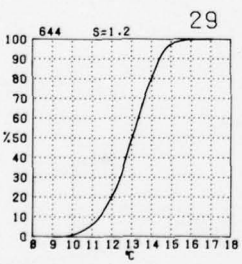


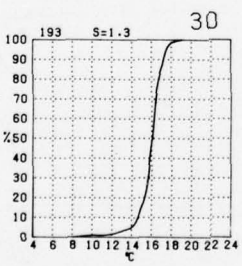


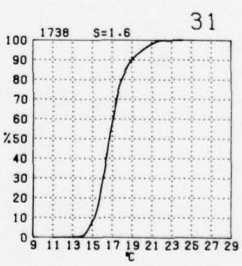


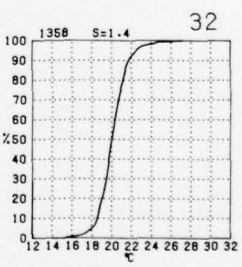


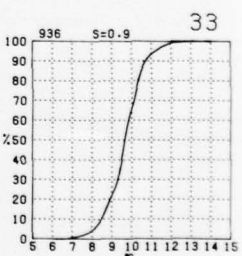






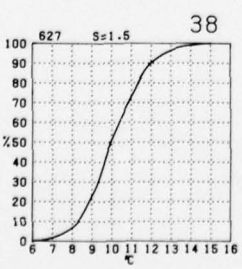


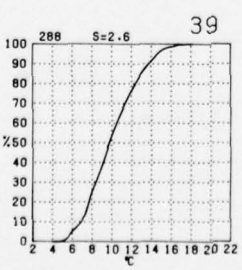


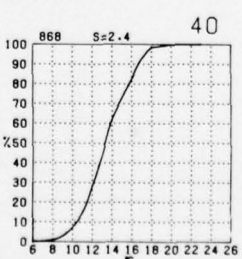


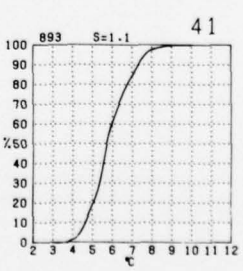
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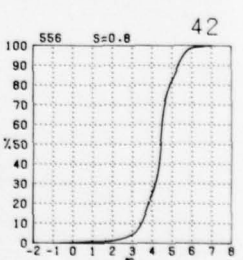
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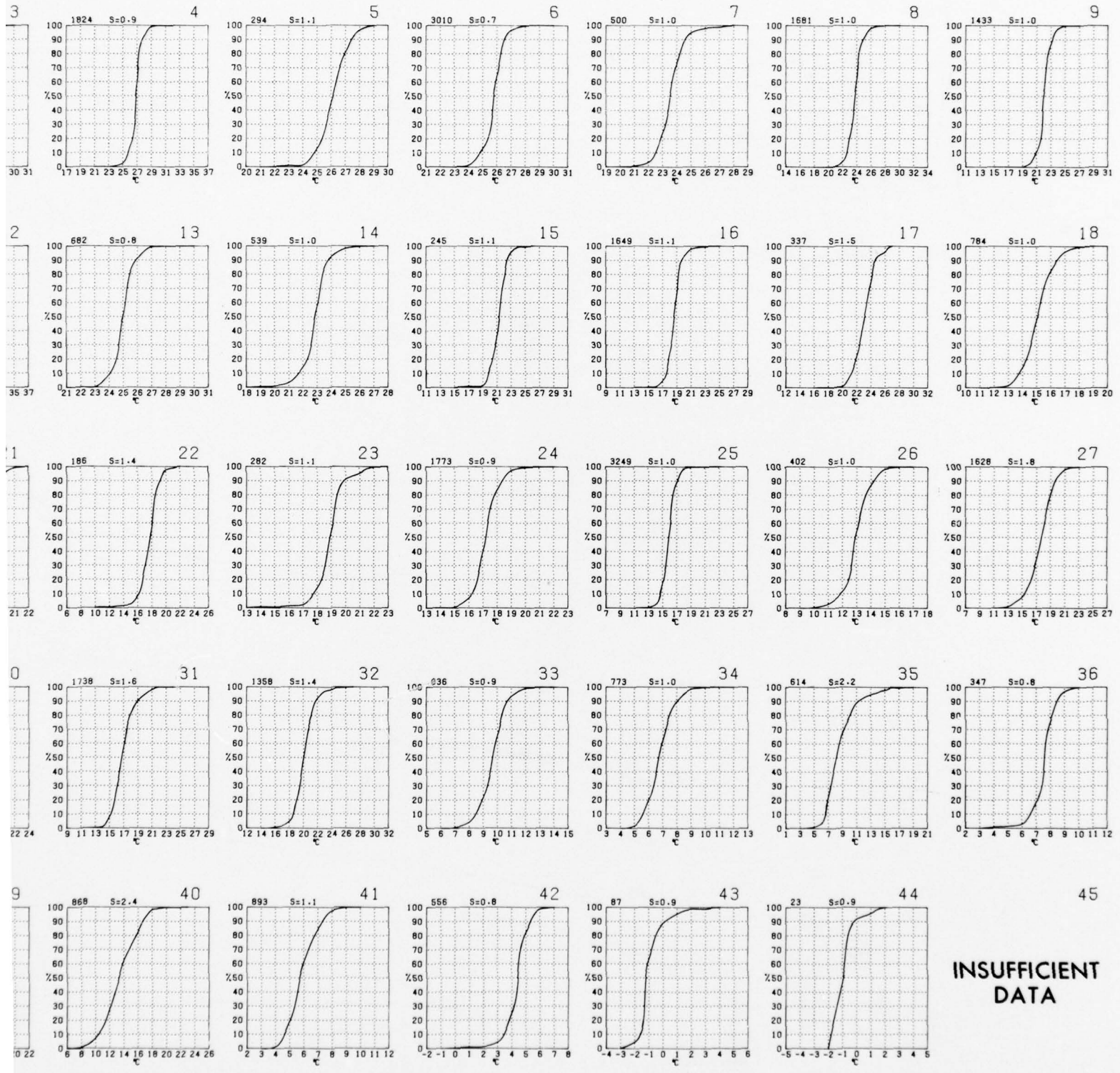








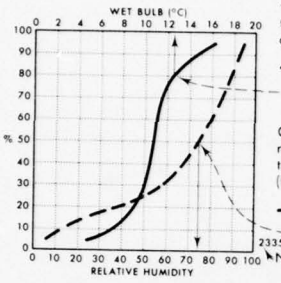
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where



INSUFFICIENT DATA

ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

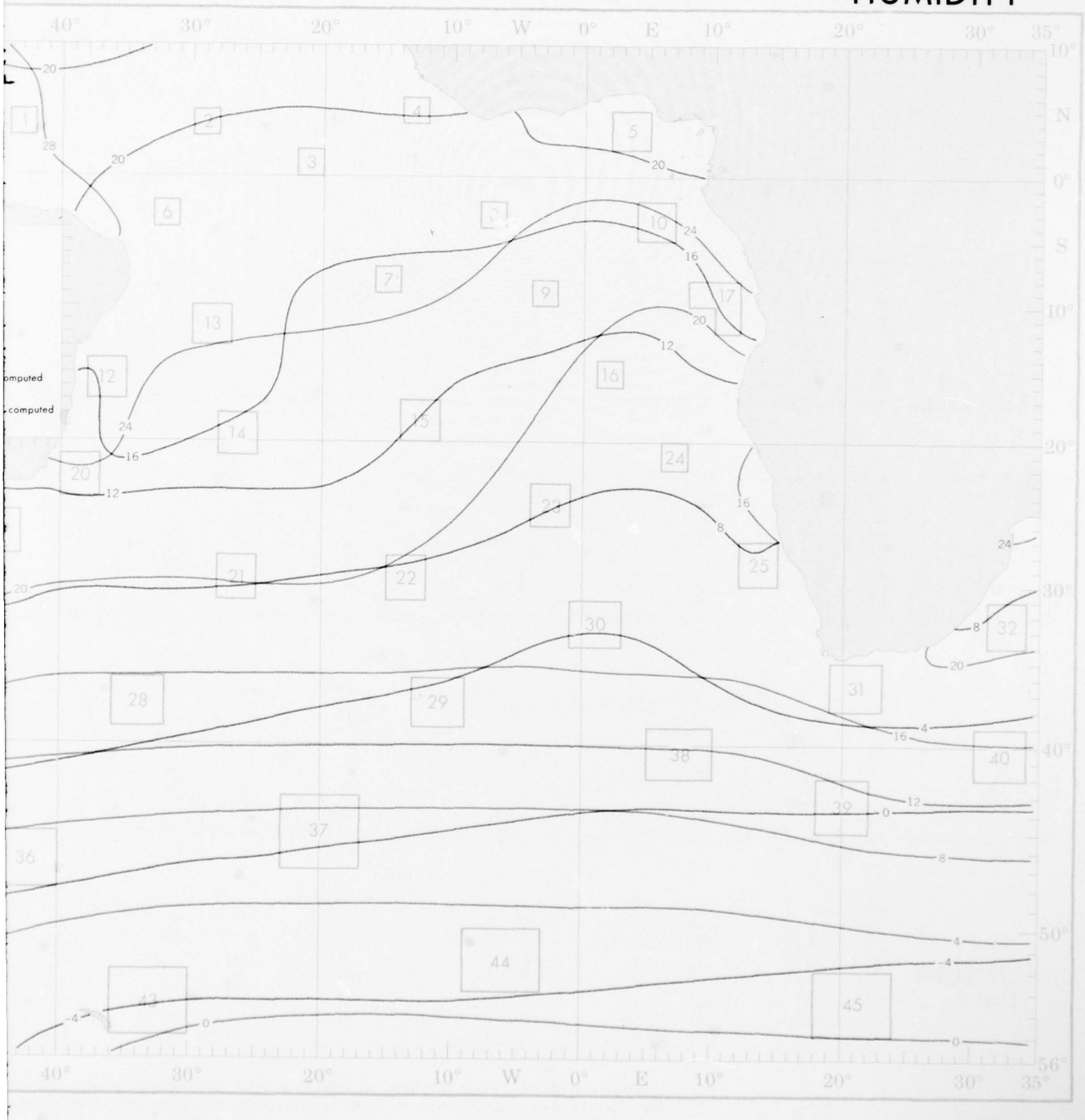
(50% of all observed relative humidities were ≤74%.)

Number of observations.

BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

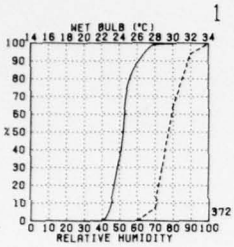
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

HUMIDITY

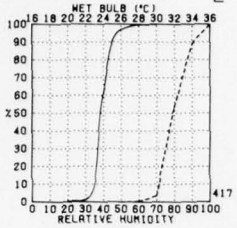

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
20 28 20 20 24 16 20 12 24 16 12 20 16 8 24 8 20 4 16 12 0 8 4 4 0
omputed
computed

WET BULB AND RELATIVE HUMIDITY

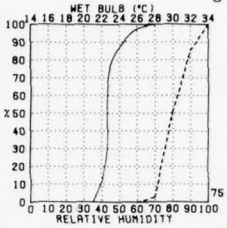
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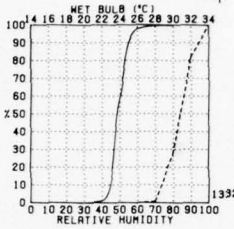
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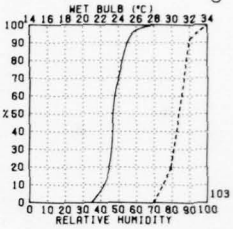
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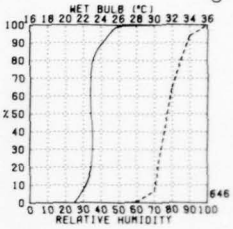
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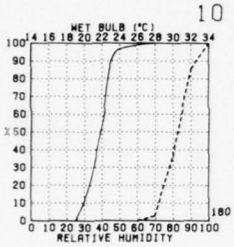
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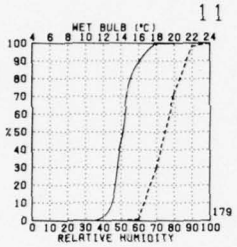
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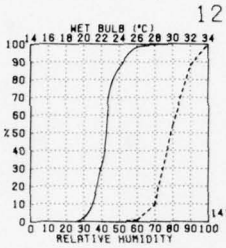
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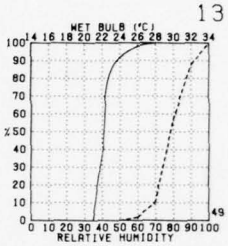
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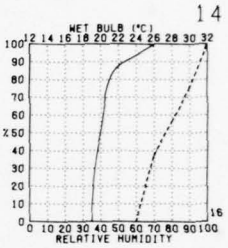
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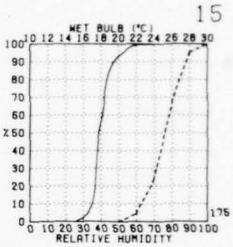
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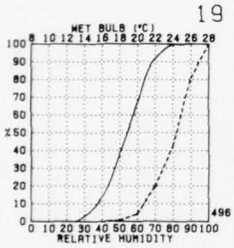
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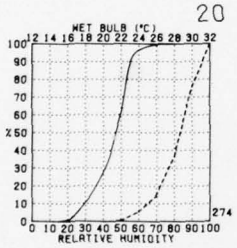
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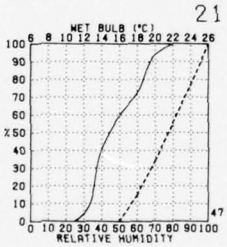
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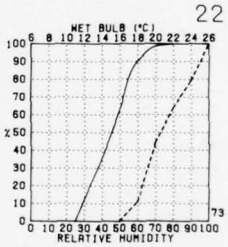
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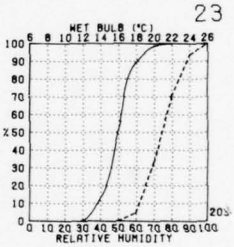
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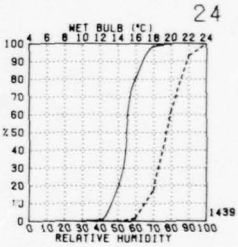
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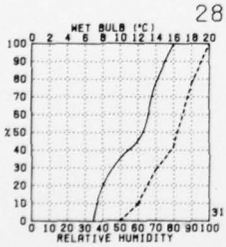
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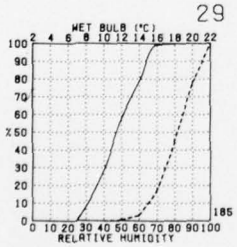
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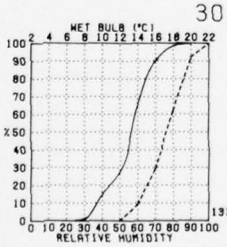
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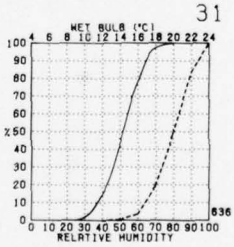
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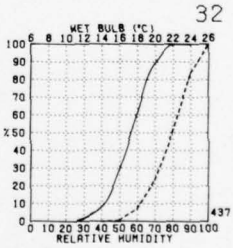
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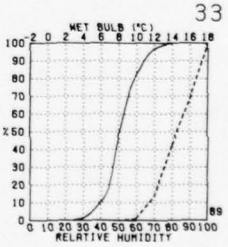
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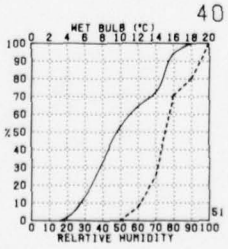
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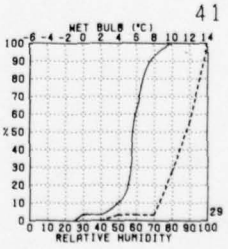
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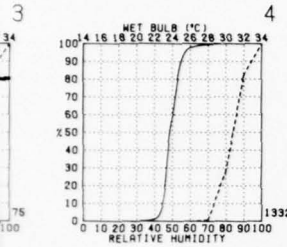
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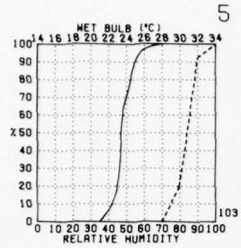
Graphs represent the objective compilation of available data for specified areas without regard to suspec
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E HUMIDITY

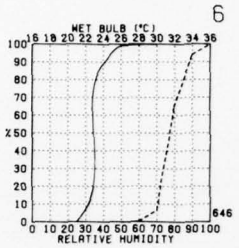
OCTOBER



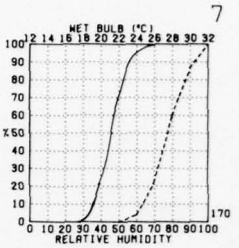
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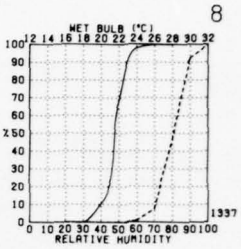
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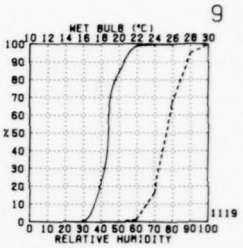
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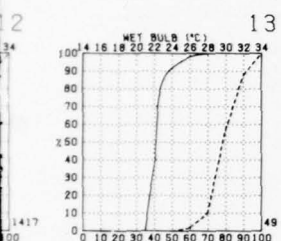
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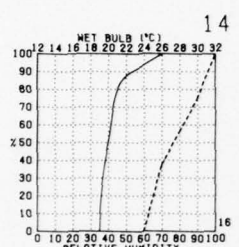
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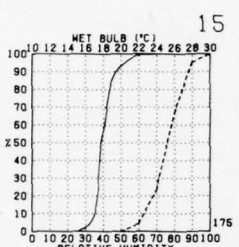
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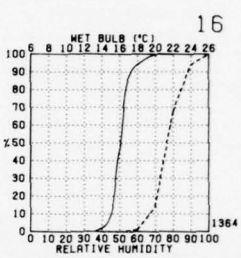
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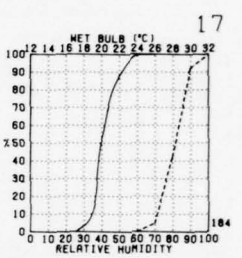
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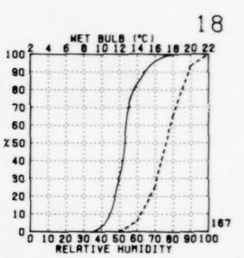
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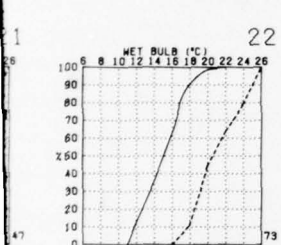
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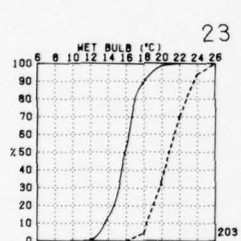
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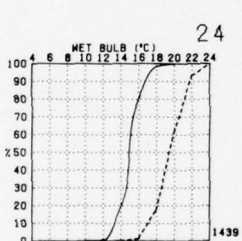
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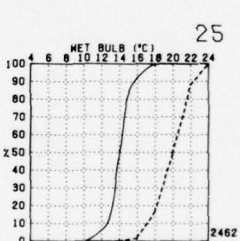
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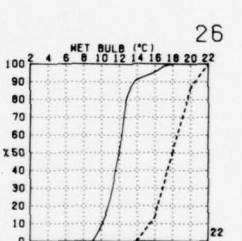
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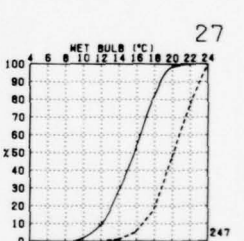
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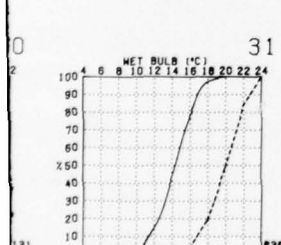
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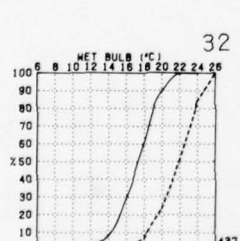
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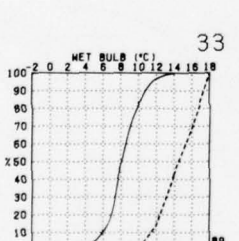
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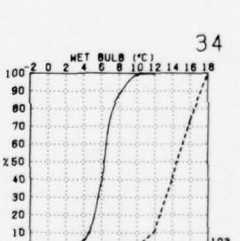
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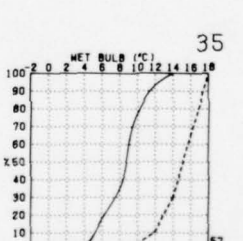
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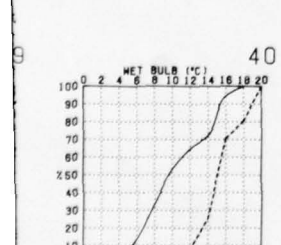
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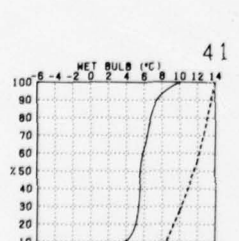
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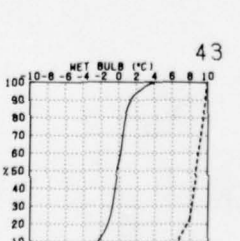
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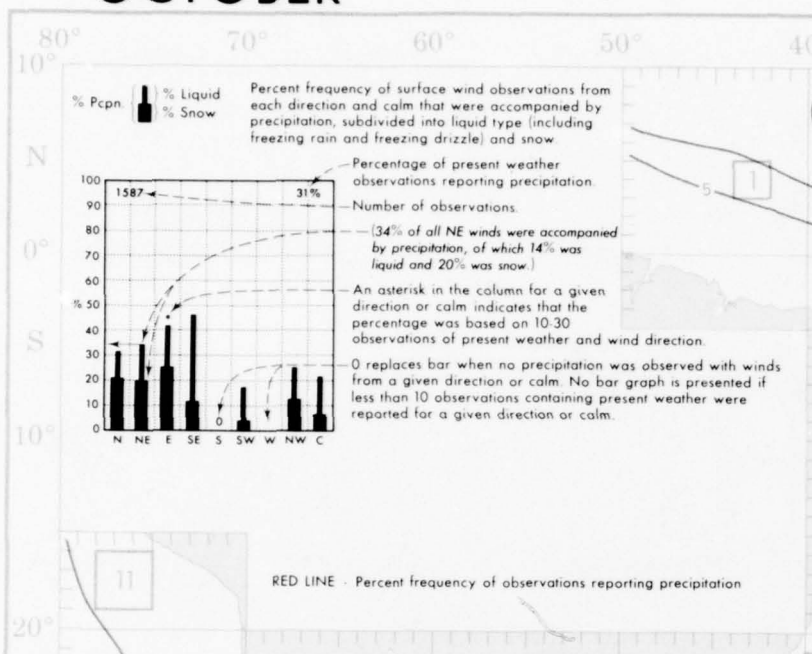
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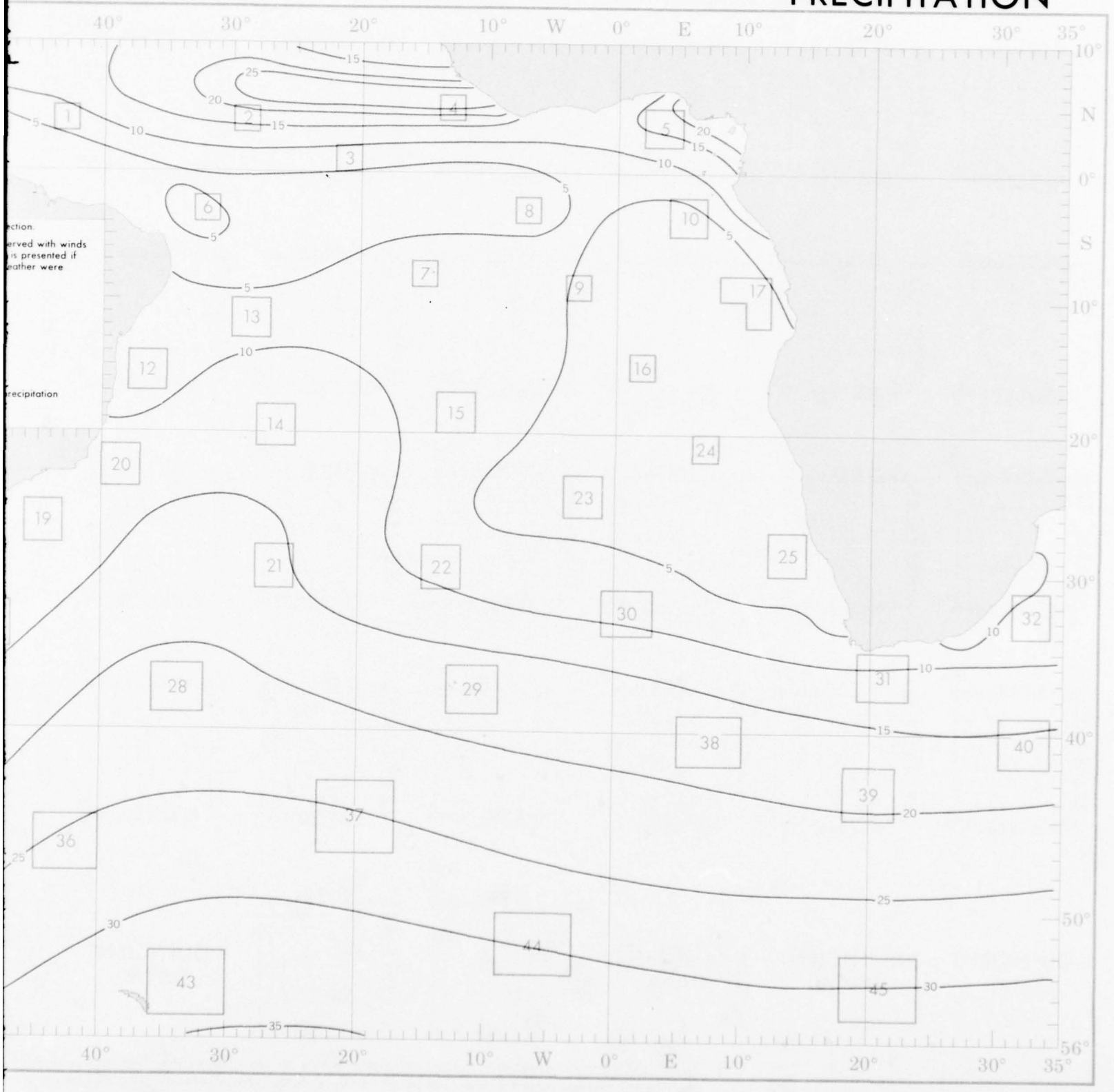
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nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

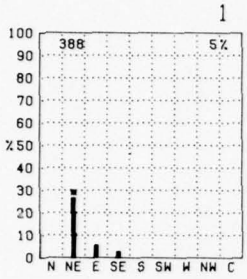
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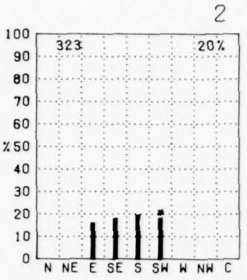

% Pcpn.
% Liquid
% Snow
Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.
Percentage of present weather observations reporting precipitation.
Number of observations.
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)
An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.
1587
31%
N NE E SE S SW W NW C
RED LINE - Percent frequency of observations reporting precipitation

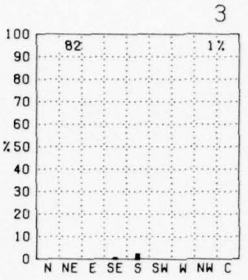
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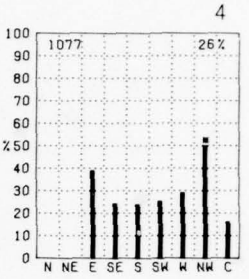


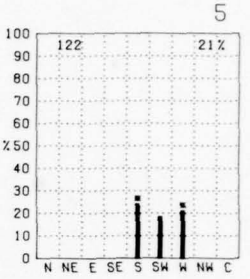
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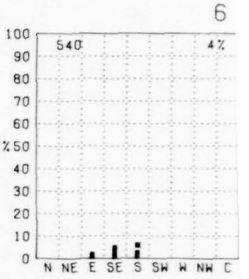


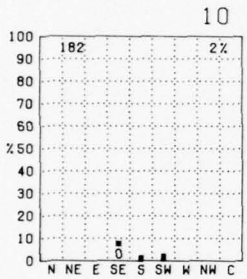


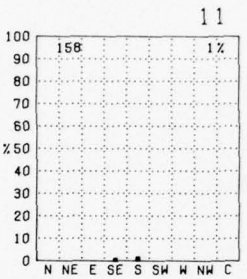


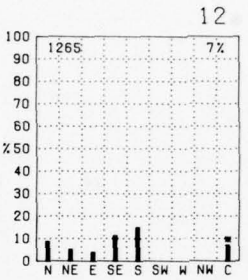


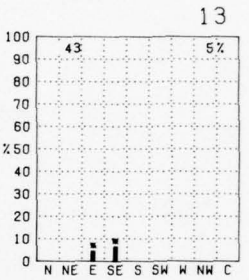






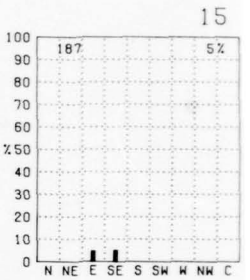


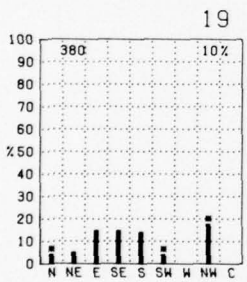


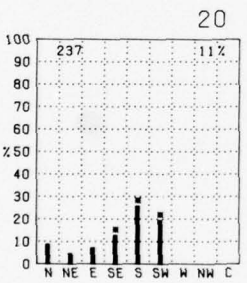


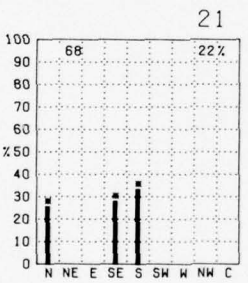
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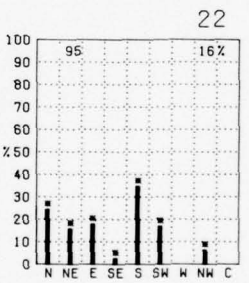
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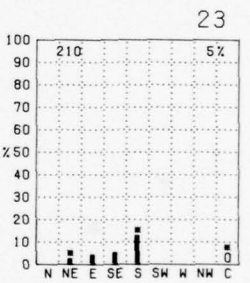


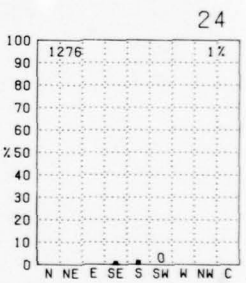


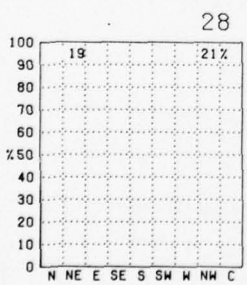


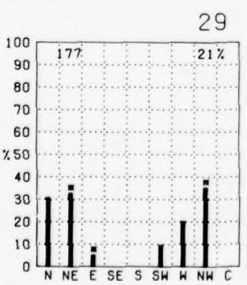


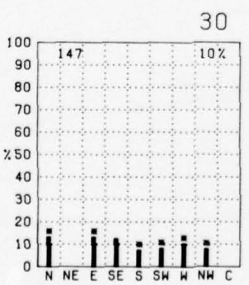


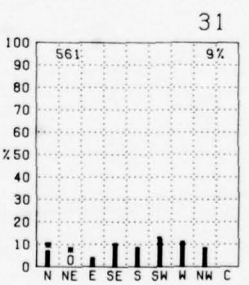


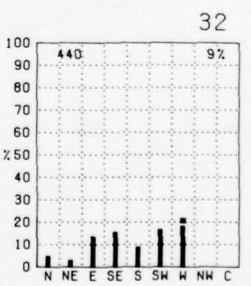


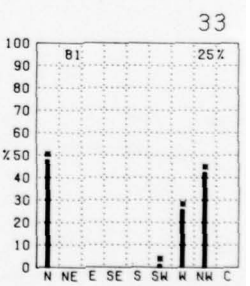












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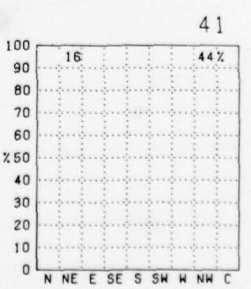
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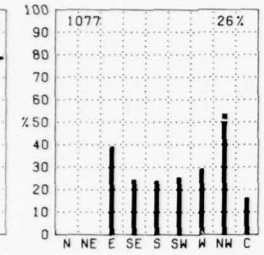
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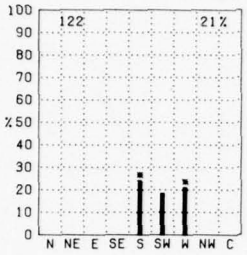
Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

OCTOBER

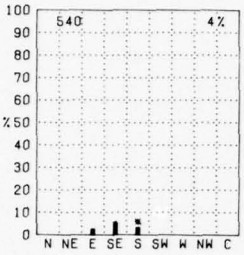
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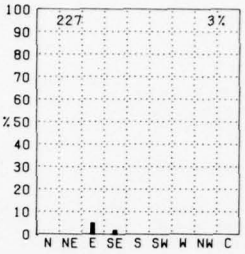
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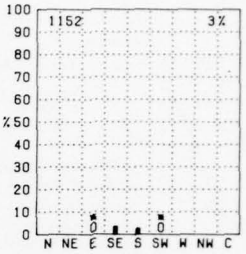
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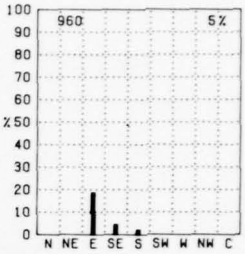
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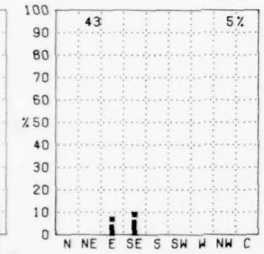
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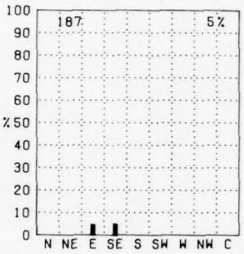
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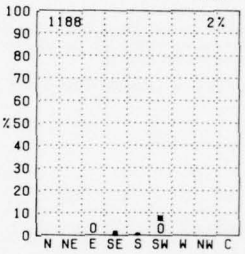
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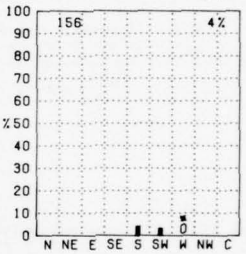
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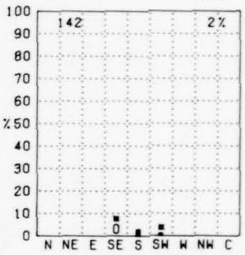
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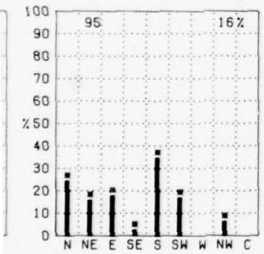
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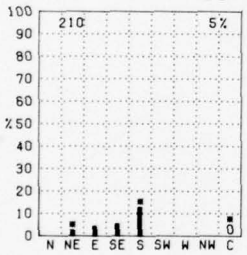
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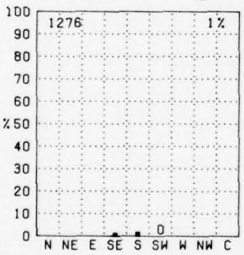
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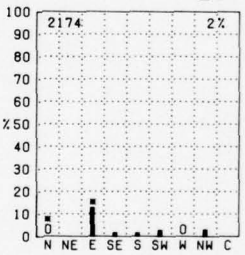
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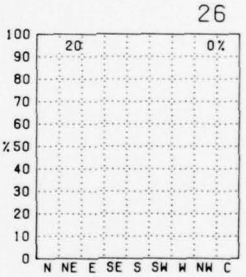
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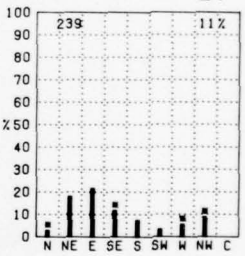
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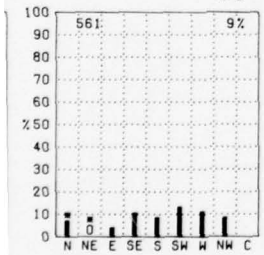
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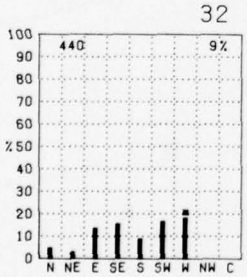
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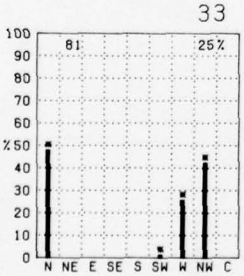
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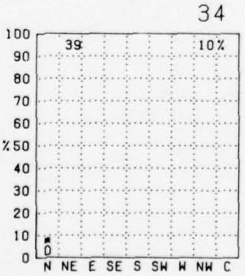
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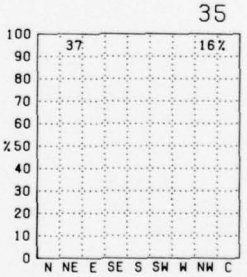
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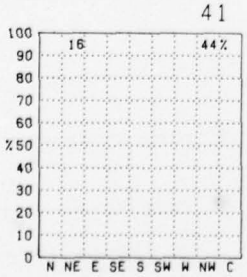
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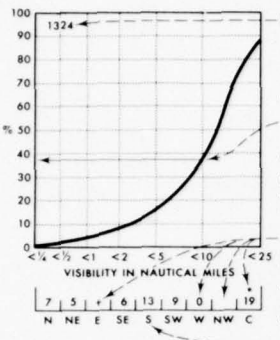
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INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
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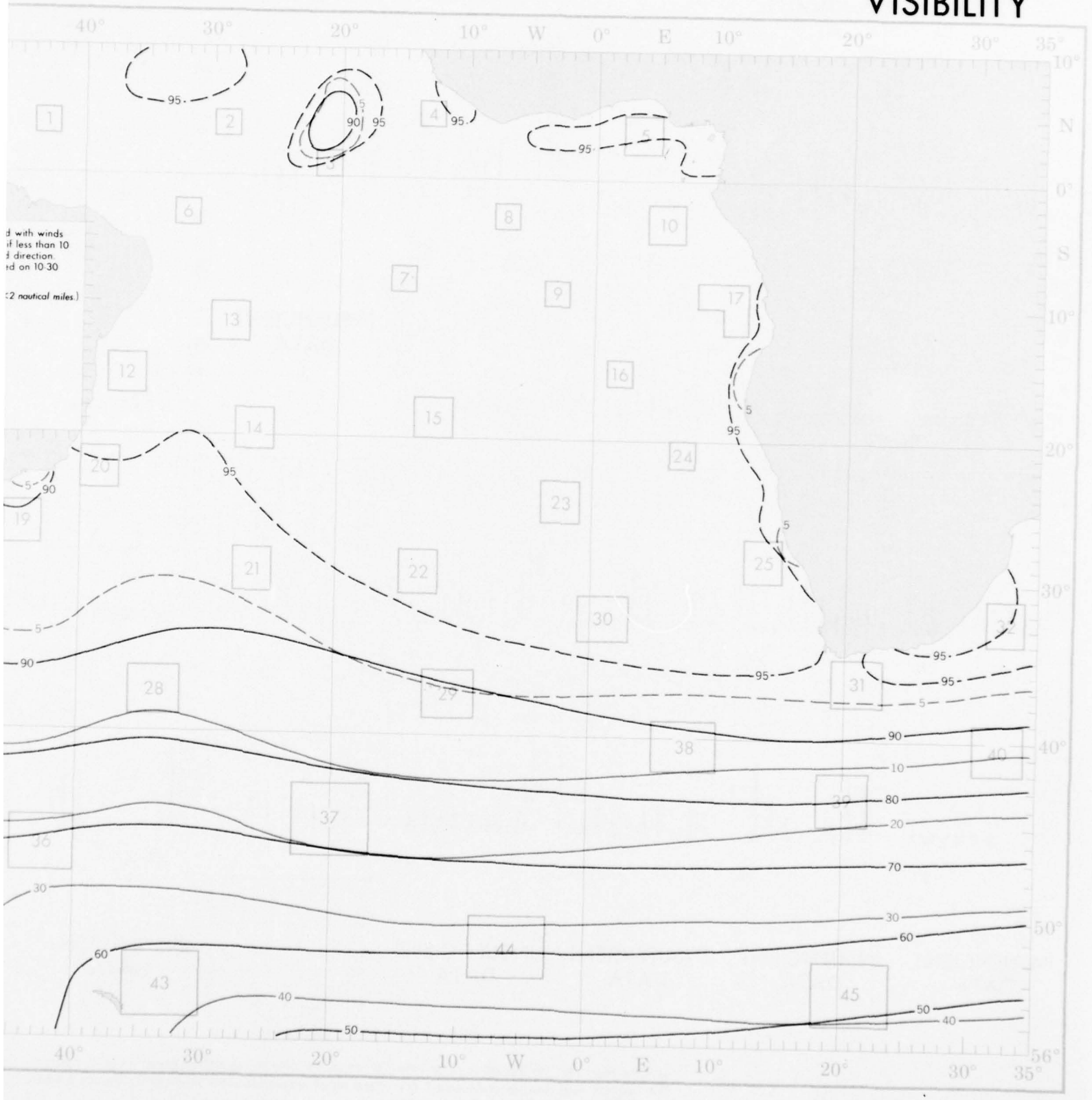
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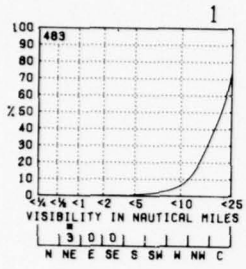
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

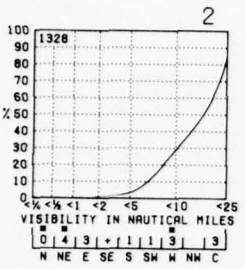
RED LINE - Percent frequency of visibilities <2 nautical miles

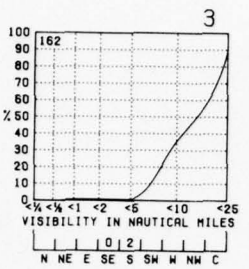
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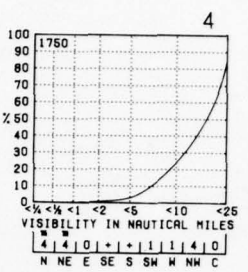

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ed on 10-30
(2 nautical miles.)
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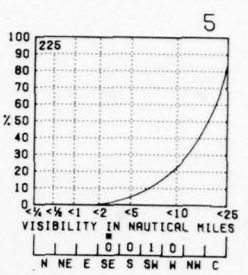
VISIBILITY

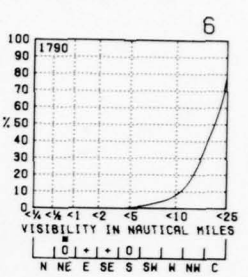


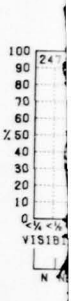


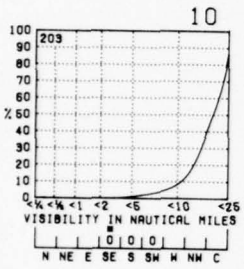


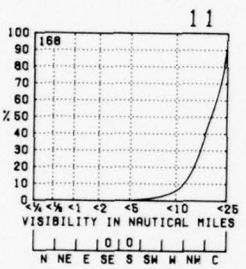


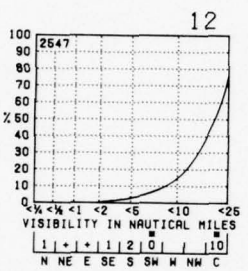


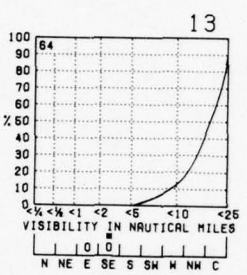


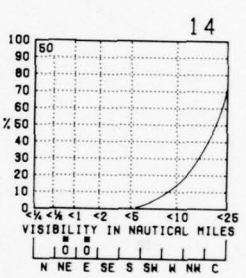


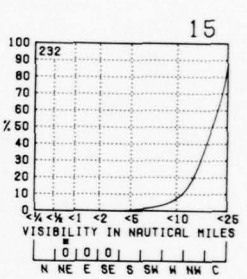


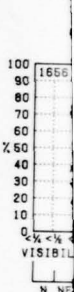


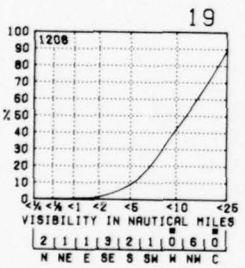


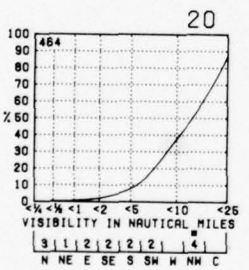


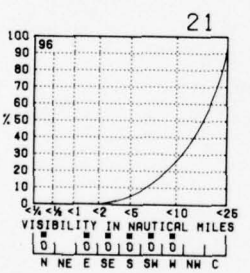


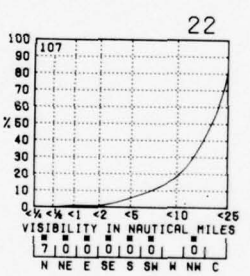


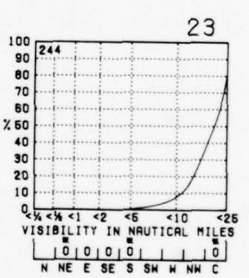


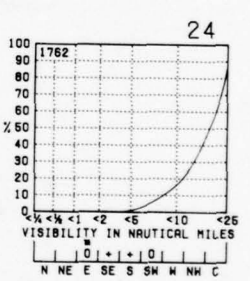


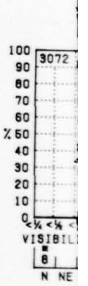


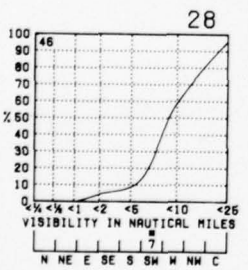


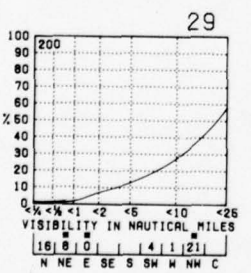


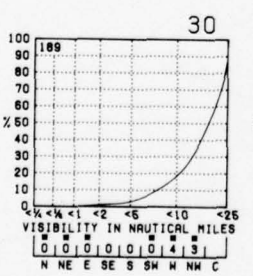


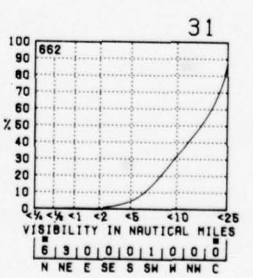


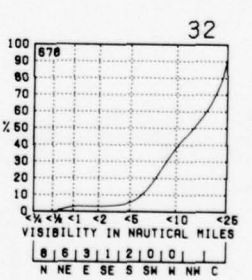


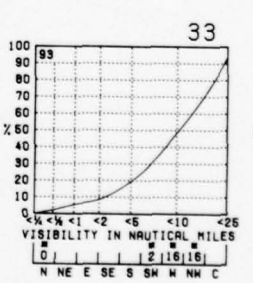


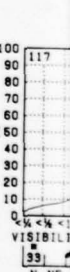


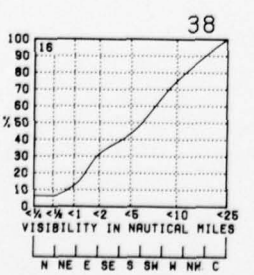






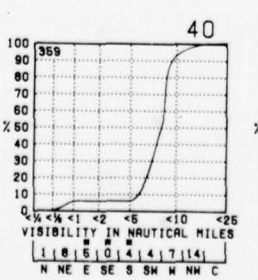


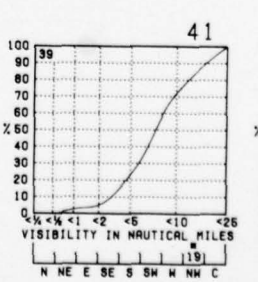


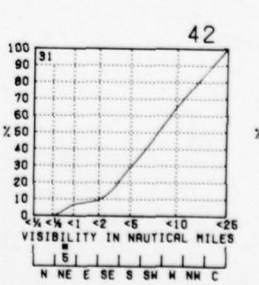


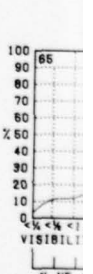
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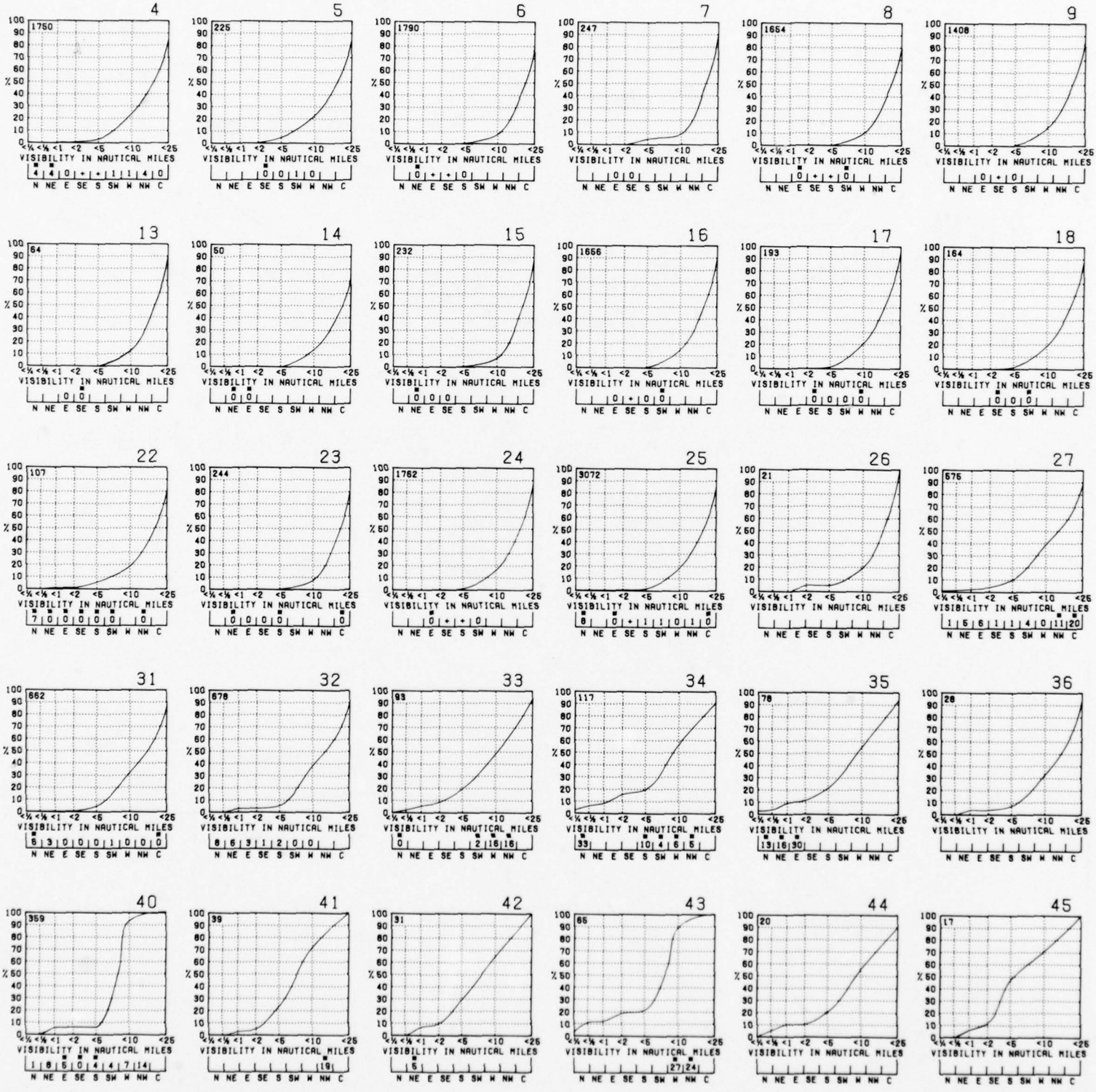






Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

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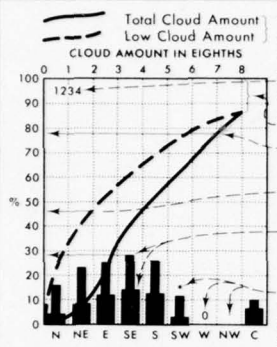


VISIBILITY IN NAUTICAL MILES

N NE E SE S SW W NW C

the objective compilation of available data for specified areas without regard to suspected biases.
ses (opposite page) are based on all available data subjectively adjusted where bias was evident.

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Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.



Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

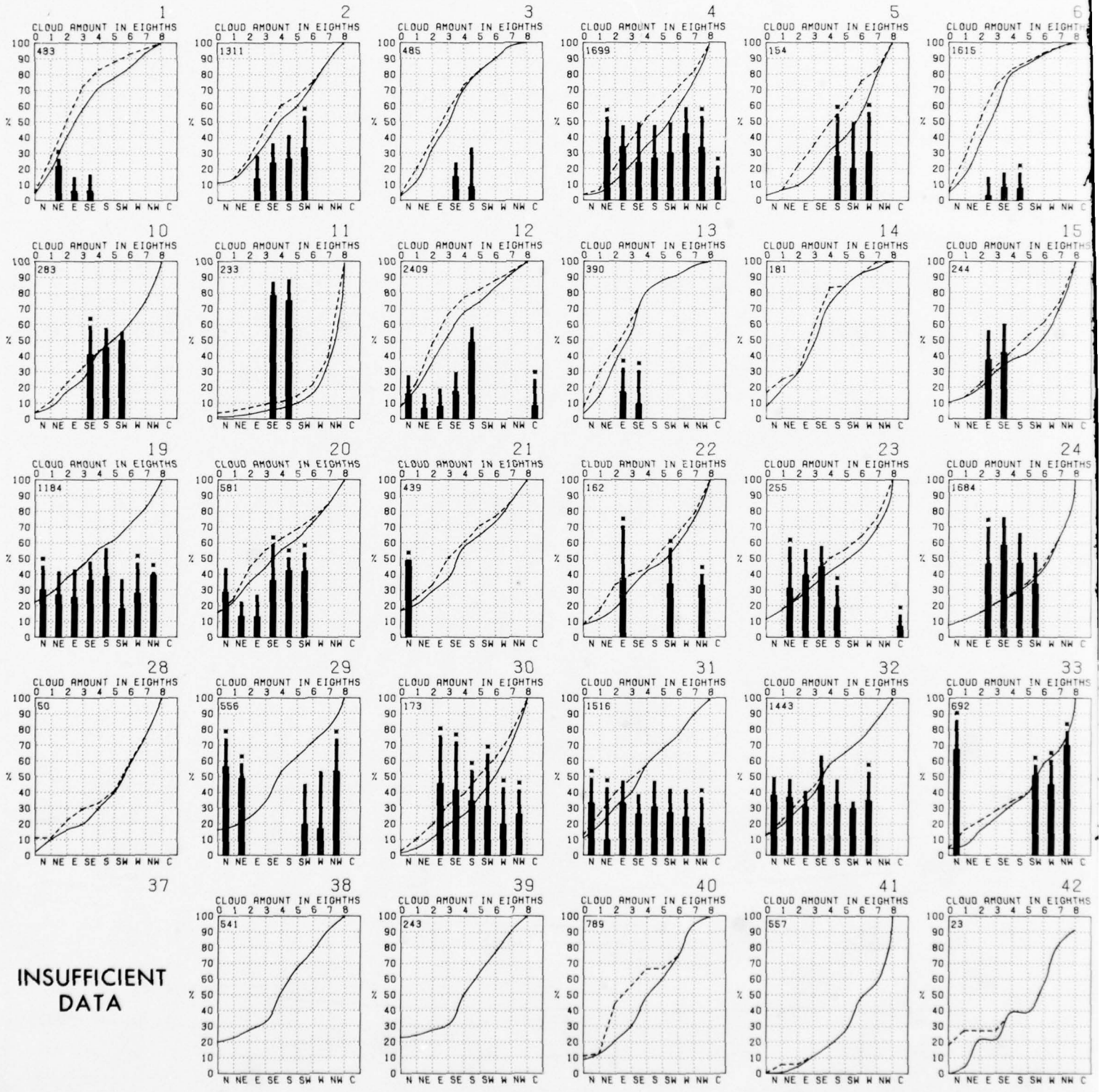
CLOUD COVER



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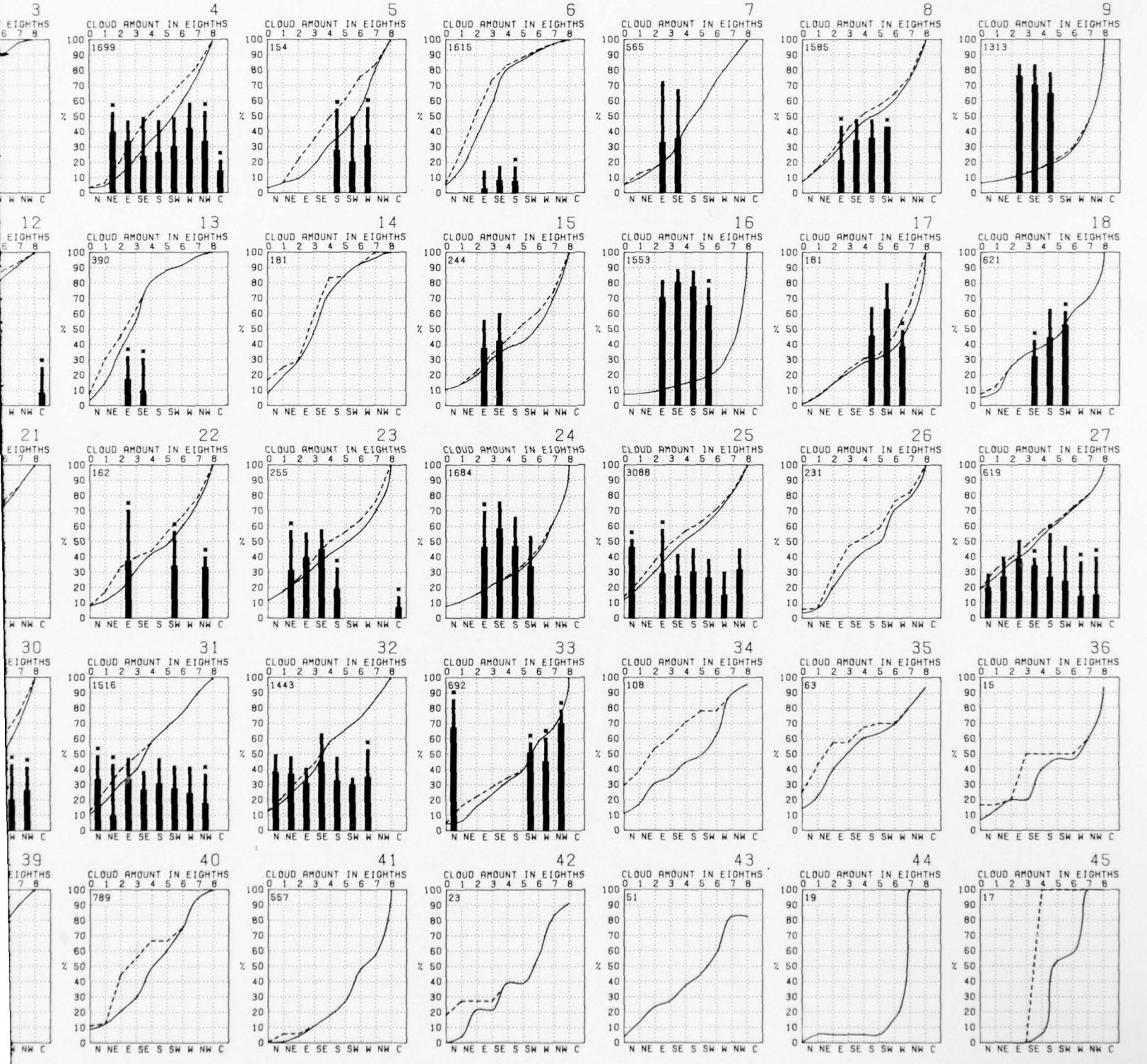
CLOUD COVER



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

OCTOBER



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OCTOBER

Low cloud ceiling - Visibility.

Percent frequency of simultaneous occurrence of specified low cloud ceilings (hundreds of feet) and visibilities (nautical miles).

Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.

Obscurations are included under ceiling "0 <1.5".

"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.

VISIBILITY

LOW CLOUD CEILING	<½	½-<1	1-<2	2-<3	3-<5	5-<10	≥10
N C	0	0	+	3	13	64	
50-<80	0	0	0	0	+	1	
35-<50	0	+	0	0	0	4	
20-<35	0	+	1	1	2	2	
10-<20	0	+	1	1	2	1	
6-<10	0	1	0	+	+	0	
3-<6	+	+	0	+	+	0	
1-<3	+	0	0	0	0	0	
0-<1.5	+	0	0	0	0	0	

334

(2% of all observations reported ceiling ≥1000 but <2000 feet simultaneously with visibility ≥5 but <10 nautical miles.)

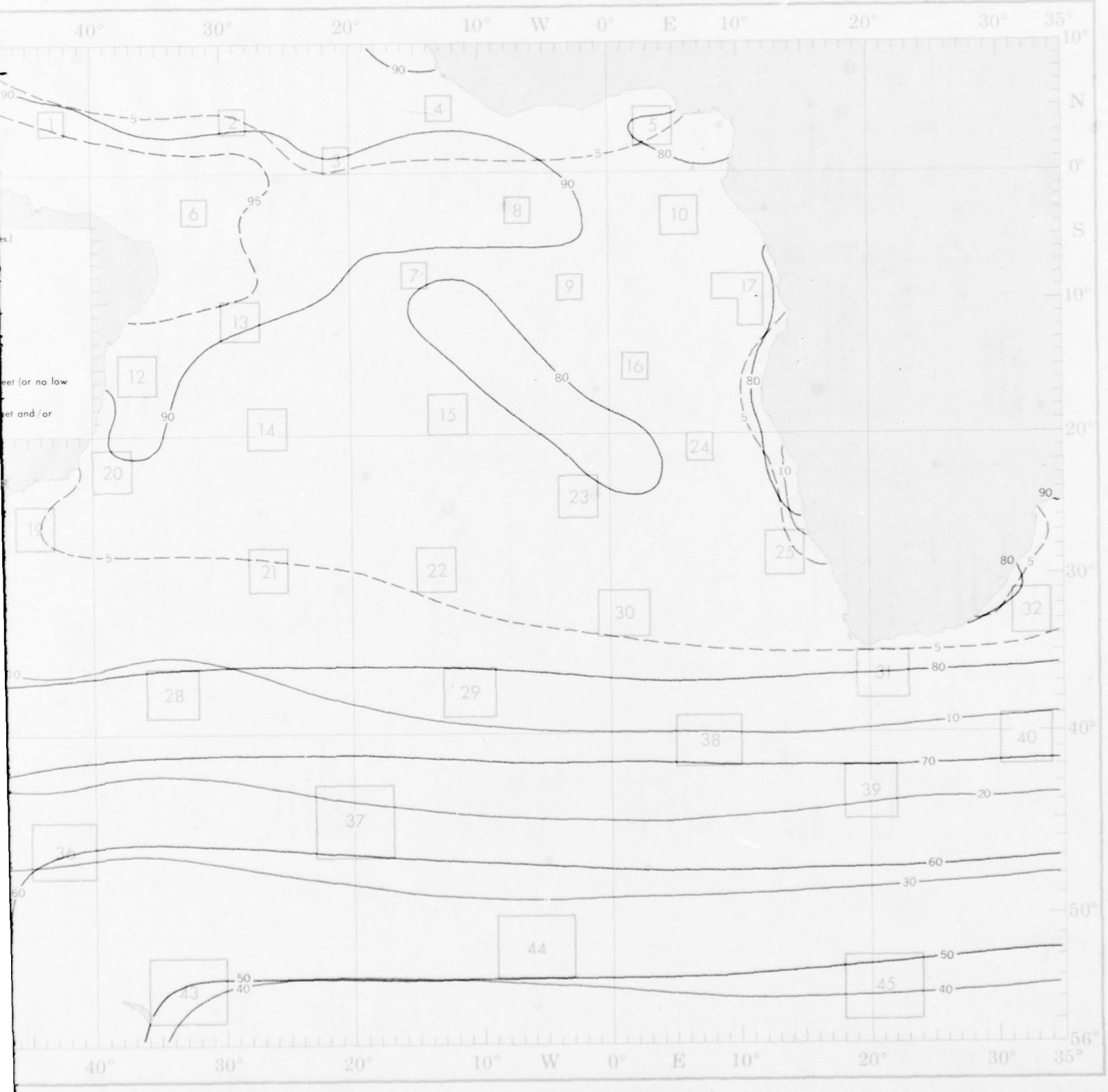
+ indicates <.5% but >0.

Number of observations.

BLUE LINE - Percent frequency of low cloud ceiling ≥1000 feet (or no low cloud ceiling) and visibility ≥5 nautical miles

RED LINE - Percent frequency of low cloud ceiling <600 feet and/or visibility <2 nautical miles

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	82
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	+	2
10<20	0	0	0	0	1	5
6<10	0	+	0	1	1	4
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	0

388

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	58
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	6
10<20	0	0	0	1	1	14
6<10	0	0	1	1	2	5
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	+
0<1.5	0	+	0	+	0	0

369

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	74
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	10
10<20	0	0	0	0	0	13
6<10	0	0	0	0	0	4
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

84

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	49
50<80	0	0	0	0	+	1
35<50	0	0	+	+	1	3
20<35	+	0	+	+	2	9
10<20	0	0	0	1	3	14
6<10	0	0	0	1	3	8
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	+	+

1160

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	46
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	5	8
10<20	0	0	0	0	5	14
6<10	0	0	0	1	3	9
3<6	0	0	0	0	2	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

111

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	83
50<80	0	0	0	+	+	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	+	3
10<20	0	0	0	+	+	6
6<10	0	0	0	0	1	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	0

594

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	44
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	16
10<20	0	0	0	0	1	23
6<10	0	0	0	0	1	9
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

174

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	9
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	4
20<35	0	0	0	0	3	25
10<20	0	0	0	0	0	38
6<10	0	0	0	0	2	15
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

137

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	2	75
50<80	0	0	0	+	+	1
35<50	0	0	0	0	1	2
20<35	0	0	+	+	1	4
10<20	0	0	0	+	1	7
6<10	0	0	0	+	1	3
3<6	+	0	0	+	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	+	+

1358

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	76
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	8
6<10	0	0	0	0	0	5
3<6	0	0	0	0	0	5
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

38

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	43
50<80	0	0	0	0	0	3
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	10
10<20	0	0	0	0	2	22
6<10	0	0	0	0	2	14
3<6	0	0	0	1	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

186

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	11	43
50<80	0	0	1	2	1	3
35<50	0	0	0	1	2	2
20<35	0	0	+	1	1	5
10<20	+	0	0	2	5	9
6<10	0	0	0	1	4	2
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	+	0	0	+	+	+

458

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	7	57
50<80	0	0	0	0	1	2
35<50	0	0	0	0	1	2
20<35	0	0	0	0	1	3
10<20	0	+	0	+	2	6
6<10	0	0	0	+	4	3
3<6	0	0	+	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	1	+	0

237

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	48
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	12
10<20	0	0	0	2	2	14
6<10	0	0	0	0	2	10
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

42

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	44
50<80	0	0	0	0	0	4
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	13
10<20	0	0	0	0	4	17
6<10	0	0	0	0	3	7
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

71

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	49
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	5
20<35	0	0	0	+	+	9
10<20	0	0	0	0	1	15
6<10	0	0	0	0	3	12
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

210

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	26
50<80	0	0	0	+	+	2
35<50	0	0	0	+	+	5
20<35	0	0	0	+	2	18
10<20	0	0	+	+	3	29
6<10	0	0	0	+	2	8
3<6	0	0	0	0	+	+
1.5<3	0	0	0	+	+	+
0<1.5	0	0	0	0	+	0

1329

28

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	12	19
50<80	0	0	0	4	0	0
35<50	0	0	0	0	4	8
20<35	0	0	0	0	8	0
10<20	0	0	4	4	15	8
6<10	0	0	0	0	4	0
3<6	0	0	0	0	4	4
1.5<3	0	0	0	0	0	4
0<1.5	0	0	0	0	0	0

26

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	36
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	1	11
10<20	0	0	0	1	3	17
6<10	0	0	3	2	4	8
3<6	0	1	1	1	2	1
1.5<3	0	0	0	1	0	0
0<1.5	1	0	1	0	1	1

182

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	36
50<80	0	0	0	0	0	0
35<50	0	0	1	0	0	5
20<35	0	0	1	1	2	11
10<20	0	0	0	0	1	26
6<10	0	0	0	0	2	6
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	2	0
0<1.5	0	0	0	0	0	1

129

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	8	51
50<80	0	0	0	0	0	1
35<50	0	0	0	+	1	2
20<35	0	0	0	+	3	6
10<20	0	0	0	1	4	11
6<10	0	0	0	1	4	6
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	+	0
0<1.5	+	0	0	0	+	0

369

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	6	48
50<80	0	0	0	0	+	1
35<50	0	0	0	+	+	2
20<35	0	0	0	+	1	6
10<20	0	0	0	+	5	15
6<10	0	0	0	1	6	6
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

413

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	28
50<80	0	0	0	0	0	1
35<50	0	0	0	1	1	3
20<35	0	0	0	1	9	9
10<20	0	0	0	4	8	6
6<10	0	0	0	3	5	8
3<6	0	0	0	1	1	3
1.5<3	0	0	1	0	0	0
0<1.5	0	0	0	1	1	0

78

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	6
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	6	12	16
10<20	0	0	0	6	29	0
6<10	0	0	0	6	12	0
3<6	0	0	0	0	0	6
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

17

42

INSUFFICIENT DATA

INSU

Graphs represent the objective compilation of available data for specified areas without regard to suspecte
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias wa

Y

OCTOBER

3

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10

84

4

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	3	49
50<80	0	0	0	0	+	1
35<50	0	0	+	+	1	3
20<35	+	0	+	+	2	9
10<20	0	0	0	1	3	14
6<10	0	0	0	1	3	8
3<6	0	0	0	+	+	1
1.5<3	0	0	0	+	+	0
0<1.5	0	0	0	0	+	+

1160

5

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	46
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	5	8
10<20	0	0	0	0	5	14
6<10	0	0	0	1	3	9
3<6	0	0	0	0	2	3
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

111

6

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	83
50<80	0	0	0	0	+	1
35<50	0	0	0	0	+	2
20<35	0	0	0	0	+	3
10<20	0	0	0	+	+	6
6<10	0	0	0	0	1	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	0

594

7

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	30
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	1
20<35	0	0	0	1	0	25
10<20	0	0	0	4	1	27
6<10	0	0	0	0	+	7
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

222

8

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	52
50<80	0	0	0	0	+	2
35<50	0	0	+	0	+	5
20<35	0	0	0	0	1	12
10<20	0	0	0	+	1	19
6<10	0	0	0	0	+	6
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	+

1222

9

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	17
50<80	0	0	0	+	+	3
35<50	0	0	0	0	1	7
20<35	0	0	0	+	1	23
10<20	0	0	+	+	2	32
6<10	0	0	0	+	1	12
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

1004

12

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10

1358

13

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	76
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	8
6<10	0	0	0	0	0	5
3<6	0	0	0	0	0	5
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

38

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	43
50<80	0	0	0	0	0	3
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	10
10<20	0	0	0	0	2	22
6<10	0	0	0	0	2	14
3<6	0	0	0	1	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

186

16

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	+	12
50<80	0	0	0	0	0	2
35<50	0	0	0	0	1	7
20<35	0	0	0	+	2	22
10<20	0	0	0	+	2	36
6<10	0	0	+	+	1	12
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	0	+

1236

17

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	32
50<80	0	0	0	0	1	0
35<50	0	0	0	0	1	4
20<35	0	0	0	0	1	16
10<20	0	0	0	1	5	32
6<10	0	0	0	0	1	5
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

151

18

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	33
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	17
10<20	0	0	0	0	4	21
6<10	0	0	0	1	1	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	0	0	1

135

21

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10

42

22

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	44
50<80	0	0	0	0	0	4
35<50	0	0	0	0	0	4
20<35	0	0	0	0	1	13
10<20	0	0	0	0	4	17
6<10	0	0	0	0	3	7
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	1

71

23

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	49
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	5
20<35	0	0	0	+	+	9
10<20	0	0	0	0	1	15
6<10	0	0	0	0	3	12
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

210

24

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	26
50<80	0	0	0	+	+	2
35<50	0	0	0	+	+	5
20<35	0	0	0	+	2	18
10<20	0	0	+	+	3	29
6<10	0	0	0	+	2	8
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	+	+
0<1.5	0	0	0	0	+	0

1329

25

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	53
50<80	+	0	0	+	1	1
35<50	0	0	0	0	+	3
20<35	+	0	0	+	1	10
10<20	0	0	0	+	2	14
6<10	0	0	0	0	2	6
3<6	0	0	0	+	+	1
1.5<3	0	0	0	0	+	+
0<1.5	+	+	0	0	0	+

2265

26

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	6	0	12	41
50<80	0	0	0	0	0	6
35<50	0	0	0	0	0	6
20<35	0	0	0	0	0	12
10<20	0	0	0	0	0	6
6<10	0	0	0	0	0	12
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

17

27

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	10	50
50<80	0	0	0	0	1	2
35<50	0	0	0	+	2	2
20<35	+	0	0	1	2	3
10<20	0	0	0	+	3	7
6<10	+	0	+	1	3	2
3<6	0	0	0	+	1	+
1.5<3	0	0	+	0	+	0
0<1.5	+	+	1	1	0	1

245

30

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10

129

31

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	8	51
50<80	0	0	0	0	0	1
35<50	0	0	0	+	1	2
20<35	0	0	0	+	3	6
10<20	0	0	0	1	4	11
6<10	0	0	0	1	4	6
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	+	0
0<1.5	+	0	0	0	+	0

369

32

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	6	48
50<80	0	0	0	0	+	1
35<50	0	0	0	+	+	2
20<35	0	0	0	+	1	6
10<20	0	0	0	+	5	15
6<10	0	0	0	1	6	6
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

413

33

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	28
50<80	0	0	0	0	0	1
35<50	0	0	0	1	1	3
20<35	0	0	0	1	9	9
10<20	0	0	0	4	8	6
6<10	0	0	0	3	5	8
3<6	0	0	0	1	1	3
1.5<3	0	0	1	0	0	0
0<1.5	0	0	0	1	1	0

78

34

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	65
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	3	10
10<20	0	0	0	0	5	10
6<10	0	0	0	0	3	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

40

35

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	3	0	0	0	15	50
50<80	0	0	0	0	0	0
35<50	0	0	0	0	3	3
20<35	0	0	0	5	0	8
10<20	0	0	0	5	0	0
6<10	0	0	0	3	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	5	3	0	0	0	0

40

36

INSUFFICIENT DATA

39

NT

40

INSUFFICIENT DATA

41

LOW CLOUD CEILING	VISIBILITY <½	½/<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	6
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	6	12	18
10<20	0	0	0	6	29	0
6<10	0	0	0	6	12	0
3<6	0	0	0	0	0	6
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

17

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

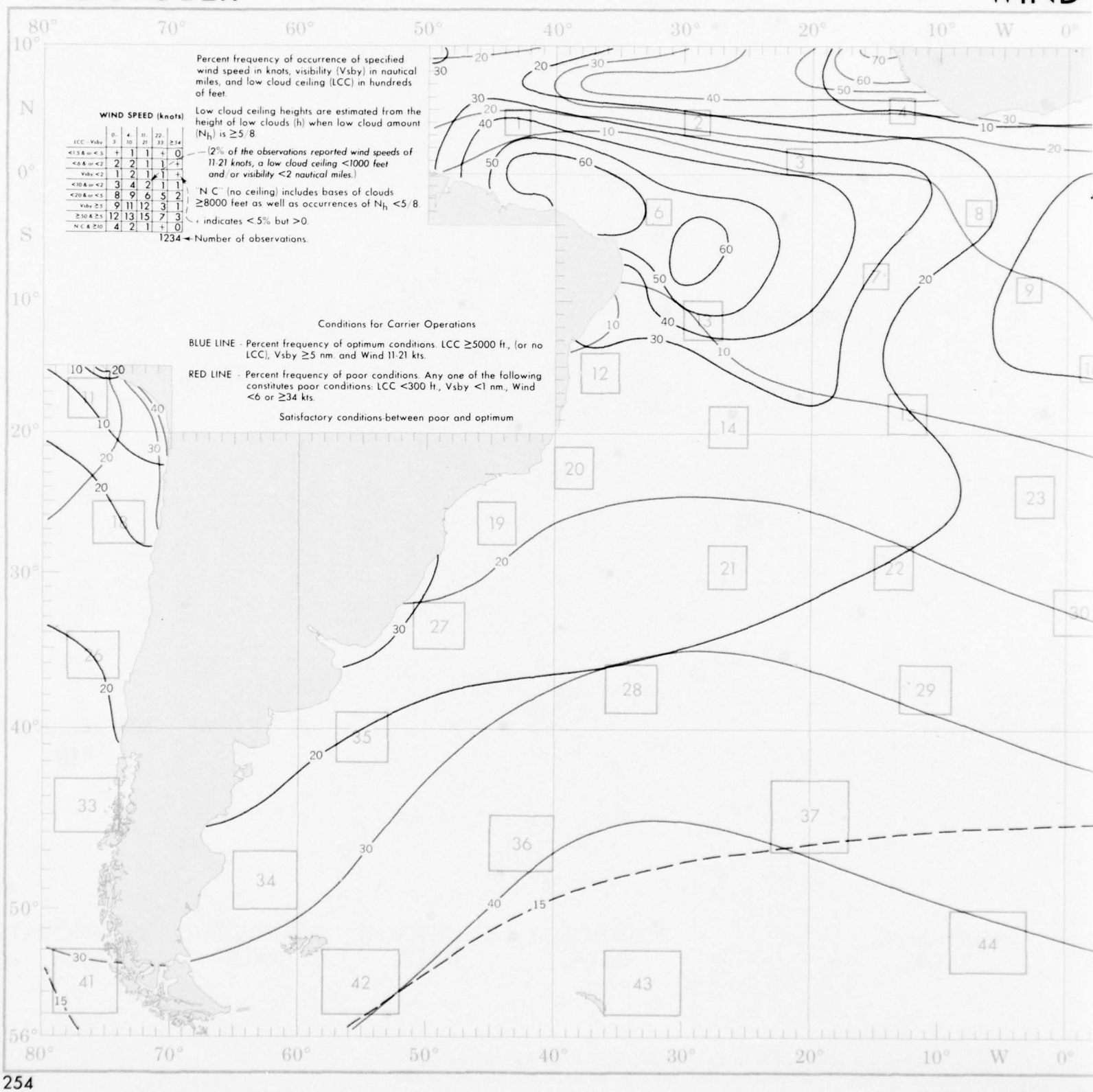
45

INSUFFICIENT DATA

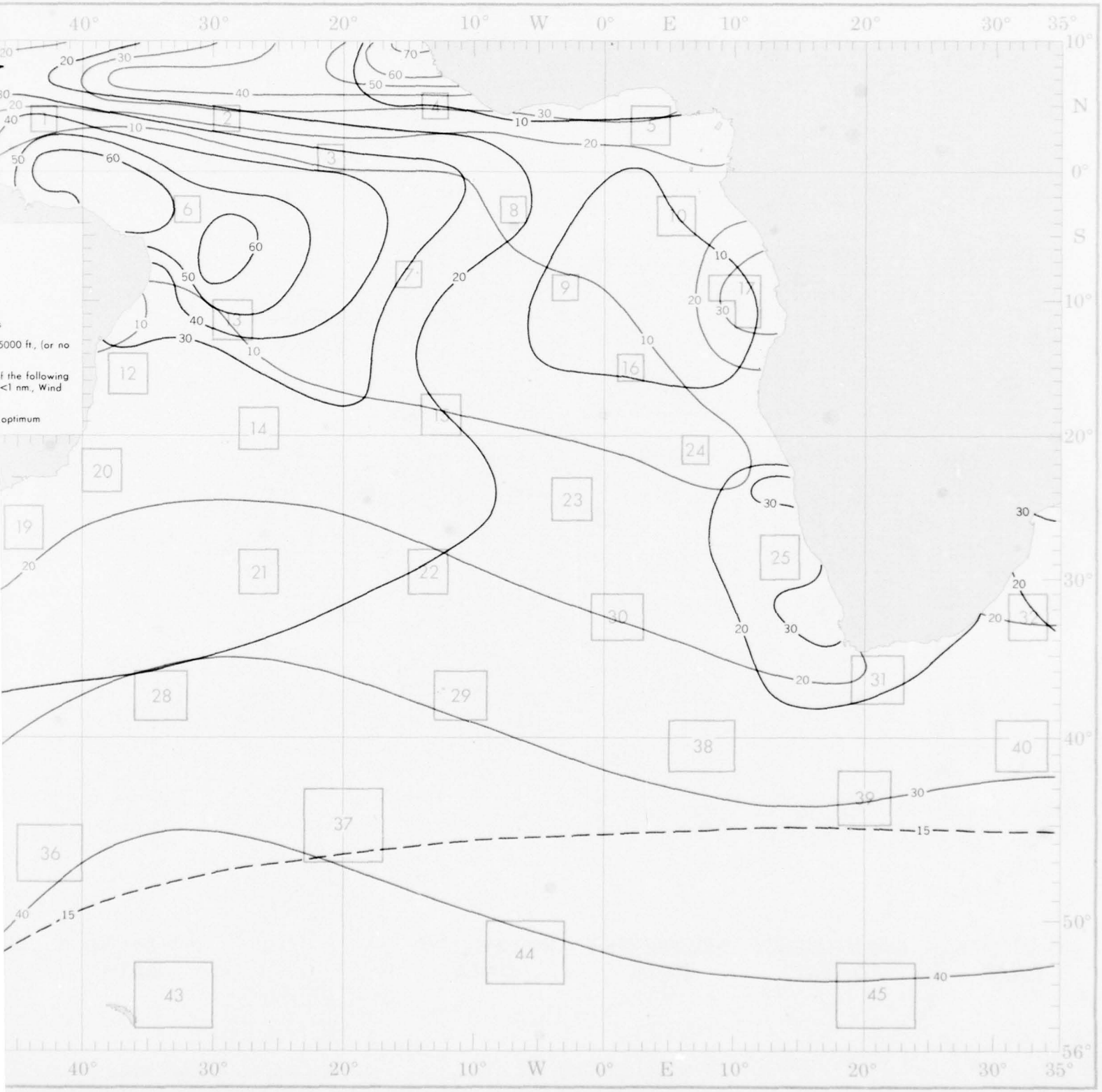
resent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER

WIND-



WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	5	2	0	0
<20 & OR <5	1	8	5	0	0
VSBY ≥5	3	49	46	1	0
≥50 & ≥5	2	40	41	1	0
NC & ≥10	2	39	41	1	0

386

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	1	1	1	0	0
VSBY <2	+	1	0	0	0
<10 & OR <2	2	5	4	0	0
<20 & OR <5	4	13	9	0	0
VSBY ≥5	8	60	29	0	0
≥50 & ≥5	4	41	17	0	0
NC & ≥10	4	38	16	0	0

361

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	1	0	0
<20 & OR <5	1	8	7	0	0
VSBY ≥5	2	55	42	1	0
≥50 & ≥5	1	42	30	1	0
NC & ≥10	1	42	30	1	0

84

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	2	1	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	8	4	0	0
<20 & OR <5	2	21	9	0	0
VSBY ≥5	11	64	22	0	0
≥50 & ≥5	8	35	11	0	0
NC & ≥10	7	32	10	0	0

1142

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	3	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	14	4	0	0
<20 & OR <5	0	25	11	1	0
VSBY ≥5	8	57	23	1	0
≥50 & ≥5	8	33	8	0	0
NC & ≥10	8	31	7	0	0

111

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	+	2	+	0
<20 & OR <5	0	2	7	1	0
VSBY ≥5	0	38	60	2	0
≥50 & ≥5	0	34	50	1	0
NC & ≥10	0	33	49	1	0

593

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	3	0	0
<20 & OR <5	2	24	10	0	0
VSBY ≥5	5	69	26	0	0
≥50 & ≥5	3	30	14	0	0
NC & ≥10	3	27	14	0	0

174

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	10	0	0
<20 & OR <5	3	26	26	1	0
VSBY ≥5	7	46	46	2	0
≥50 & ≥5	1	4	6	1	0
NC & ≥10	1	2	5	1	0

136

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	1	1	+	0
VSBY <2	+	+	+	+	0
<10 & OR <2	+	3	3	+	0
<20 & OR <5	1	7	7	+	+
VSBY ≥5	5	57	35	1	+
≥50 & ≥5	4	47	27	1	+
NC & ≥10	4	45	25	+	+

1344

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	5	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	8	0	0
<20 & OR <5	0	3	16	0	0
VSBY ≥5	0	37	63	0	0
≥50 & ≥5	0	34	45	0	0
NC & ≥10	0	34	42	0	0

38

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	10	4	0
<20 & OR <5	1	13	24	4	0
VSBY ≥5	3	37	53	7	0
≥50 & ≥5	2	18	24	2	0
NC & ≥10	2	16	23	2	0

186

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	+	+	0
<6 & OR <2	0	1	2	1	0
VSBY <2	0	+	1	+	0
<10 & OR <2	1	2	6	2	0
<20 & OR <5	1	9	15	5	+
VSBY ≥5	4	32	42	14	0
≥50 & ≥5	3	23	25	9	0
NC & ≥10	2	18	19	5	0

441

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	+	0	0
<6 & OR <2	0	2	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	3	6	1	0
<20 & OR <5	1	7	11	2	0
VSBY ≥5	6	30	52	6	0
≥50 & ≥5	5	22	35	4	0
NC & ≥10	4	19	31	2	0

235

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	7	5	0	0
<20 & OR <5	0	12	14	5	0
VSBY ≥5	5	48	40	5	0
≥50 & ≥5	5	31	19	0	0
NC & ≥10	5	31	12	0	0

42

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	7	0	0
<20 & OR <5	1	15	17	0	0
VSBY ≥5	3	56	35	4	0
≥50 & ≥5	1	28	15	3	0
NC & ≥10	0	25	15	3	0

71

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	6	8	1	0
<20 & OR <5	3	11	16	2	0
VSBY ≥5	15	39	42	3	0
≥50 & ≥5	11	22	19	1	0
NC & ≥10	11	20	17	1	0

209

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	3	7	1	+
<20 & OR <5	1	12	26	5	+
VSBY ≥5	2	29	58	10	+
≥50 & ≥5	1	11	16	3	0
NC & ≥10	1	10	14	2	0

1326

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	4	12	0	0
VSBY <2	0	0	4	0	0
<10 & OR <2	0	4	12	0	4
<20 & OR <5	0	8	27	8	8
VSBY ≥5	0	8	58	15	8
≥50 & ≥5	0	4	19	8	0
NC & ≥10	0	4	15	0	0

26

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	1	1
<6 & OR <2	0	0	2	5	3
VSBY <2	0	0	1	3	3
<10 & OR <2	1	1	3	13	6
<20 & OR <5	3	8	12	18	6
VSBY ≥5	6	28	28	23	5
≥50 & ≥5	2	13	15	9	2
NC & ≥10	2	13	14	8	1

172

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	2	3	2	0
VSBY <2	0	0	2	0	0
<10 & OR <2	0	4	8	4	0
<20 & OR <5	4	14	20	5	0
VSBY ≥5	8	37	45	7	1
≥50 & ≥5	1	19	18	2	0
NC & ≥10	1	19	16	1	0

129

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	+	0
<6 & OR <2	+	1	1	1	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	3	5	2	1
<20 & OR <5	1	6	12	8	1
VSBY ≥5	5	34	38	18	2
≥50 & ≥5	4	24	24	7	1
NC & ≥10	4	22	22	4	+

367

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	6	2	1
<20 & OR <5	2	7	15	8	2
VSBY ≥5	6	30	40	18	4
≥50 & ≥5	4	19	21	11	2
NC & ≥10	4	16	19	9	1

409

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	5	3	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	3	18	3	0
<20 & OR <5	1	5	32	5	0
VSBY ≥5	3	26	53	5	0
≥50 & ≥5	3	14	13	4	0
NC & ≥10	1	14	10	3	0

77

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	6	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	6	18	0
<20 & OR <5	0	0	29	29	6
VSBY ≥5	0	0	53	29	0
≥50 & ≥5	0	0	6	0	0
NC & ≥10	0	0	6	0	0

17

42

INSUFFICIENT DATA

IN

Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

SIBILITY-WIND

OCTOBER

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	2	1	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	8	4	0	0
<20 & OR <5	2	21	9	0	0
VSBY ≥5	11	64	22	0	0
≥50 & ≥5	8	35	11	0	0
NC & ≥ 10	7	32	10	0	0

1142

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	3	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	14	4	0	0
<20 & OR <5	0	25	11	1	0
VSBY ≥5	8	67	23	1	0
≥50 & ≥5	8	33	8	0	0
NC & ≥ 10	8	31	7	0	0

111

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	+	2	+	0
<20 & OR <5	0	2	7	1	0
VSBY ≥5	0	38	60	2	0
≥50 & ≥5	0	34	50	1	0
NC & ≥ 10	0	33	49	1	0

593

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	7	1	0
<20 & OR <5	0	6	34	2	0
VSBY ≥5	+	15	75	5	0
≥50 & ≥5	+	7	24	1	0
NC & ≥ 10	+	6	23	1	0

220

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	+	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	+	0	0	0
<10 & OR <2	+	4	3	0	0
<20 & OR <5	1	15	12	+	0
VSBY ≥5	2	54	43	+	0
≥50 & ≥5	1	29	25	+	0
NC & ≥ 10	1	27	24	+	0

1215

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	6	8	+	0
<20 & OR <5	1	20	27	+	0
VSBY ≥5	1	46	51	1	0
≥50 & ≥5	+	11	10	+	0
NC & ≥ 10	+	8	8	+	0

1003

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	5	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	8	0	0
<20 & OR <5	0	3	16	0	0
VSBY ≥5	0	37	63	0	0
≥50 & ≥5	0	34	45	0	0
NC & ≥ 10	0	34	42	0	0

38

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	1	1	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	10	4	0
<20 & OR <5	1	13	24	4	0
VSBY ≥5	3	37	53	7	0
≥50 & ≥5	2	18	24	2	0
NC & ≥ 10	2	16	23	2	0

186

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	4	9	1	0
<20 & OR <5	+	16	32	4	0
VSBY ≥5	1	34	60	5	0
≥50 & ≥5	+	5	9	1	0
NC & ≥ 10	+	5	7	1	0

1231

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	5	1	0	0
<20 & OR <5	3	31	10	0	0
VSBY ≥5	9	72	18	0	0
≥50 & ≥5	5	23	5	0	0
NC & ≥ 10	5	22	5	0	0

151

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	3	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	6	1	0
<20 & OR <5	3	16	13	5	0
VSBY ≥5	7	35	40	16	0
≥50 & ≥5	2	11	19	7	0
NC & ≥ 10	2	11	16	4	0

134

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	7	0	0
<20 & OR <5	1	15	17	0	0
VSBY ≥5	3	56	35	4	0
≥50 & ≥5	1	28	15	3	0
NC & ≥ 10	0	25	15	3	0

71

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	6	8	1	0
<20 & OR <5	3	11	16	2	0
VSBY ≥5	15	39	42	3	0
≥50 & ≥5	11	22	19	1	0
NC & ≥ 10	11	20	17	1	0

209

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	3	7	1	+
<20 & OR <5	1	12	26	5	+
VSBY ≥5	2	29	58	10	+
≥50 & ≥5	1	11	16	3	0
NC & ≥ 10	1	10	14	2	0

1326

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	+	1	1	+	0
VSBY <2	0	+	+	0	0
<10 & OR <2	+	3	5	1	0
<20 & OR <5	1	8	13	4	+
VSBY ≥5	3	29	47	18	2
≥50 & ≥5	2	16	28	12	2
NC & ≥ 10	1	15	24	10	1

2255

26

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	6
VSBY <2	0	0	0	0	6
<10 & OR <2	0	0	12	0	6
<20 & OR <5	0	6	12	0	6
VSBY ≥5	0	35	47	12	0
≥50 & ≥5	0	24	29	6	0
NC & ≥ 10	0	18	18	6	0

17

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	2	2	0
<6 & OR <2	0	2	2	2	1
VSBY <2	0	2	+	1	0
<10 & OR <2	0	4	5	4	1
<20 & OR <5	+	6	12	6	2
VSBY ≥5	3	30	43	13	2
≥50 & ≥5	3	24	28	7	+
NC & ≥ 10	3	21	22	5	0

241

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	+	0
<6 & OR <2	+	1	1	1	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	3	5	2	1
<20 & OR <5	1	6	12	8	1
VSBY ≥5	5	34	38	18	2
≥50 & ≥5	4	24	24	7	1
NC & ≥ 10	4	22	22	4	+

367

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	0	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	3	6	2	1
<20 & OR <5	2	7	15	8	2
VSBY ≥5	6	30	40	18	4
≥50 & ≥5	4	19	21	11	2
NC & ≥ 10	4	16	19	9	1

409

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	0	5	3	0
VSBY <2	0	0	0	1	0
<10 & OR <2	0	3	18	3	0
<20 & OR <5	1	5	32	5	0
VSBY ≥5	3	26	53	5	0
≥50 & ≥5	3	14	13	4	0
NC & ≥ 10	1	14	10	3	0

77

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	3	0	0
<20 & OR <5	0	0	13	3	3
VSBY ≥5	0	18	63	18	3
≥50 & ≥5	0	15	43	13	0
NC & ≥ 10	0	15	43	8	0

40

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	3	8	0
<6 & OR <2	0	0	3	8	0
VSBY <2	0	0	3	8	0
<10 & OR <2	0	3	3	8	0
<20 & OR <5	0	3	8	10	3
VSBY ≥5	0	30	30	18	0
≥50 & ≥5	0	23	25	18	0
NC & ≥ 10	0	20	23	8	0

40

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	6	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	6	18	0
<20 & OR <5	0	0	29	29	6
VSBY ≥5	0	0	53	29	0
≥50 & ≥5	0	0	6	0	0
NC & ≥ 10	0	0	6	0	0

17

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

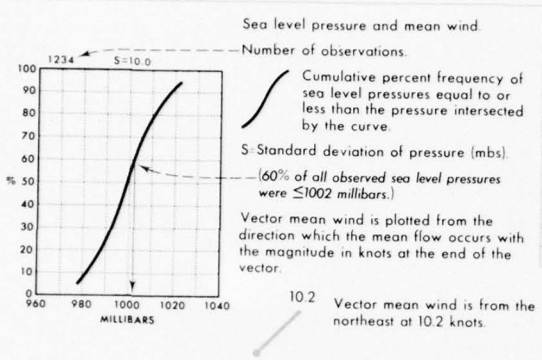
45

INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER

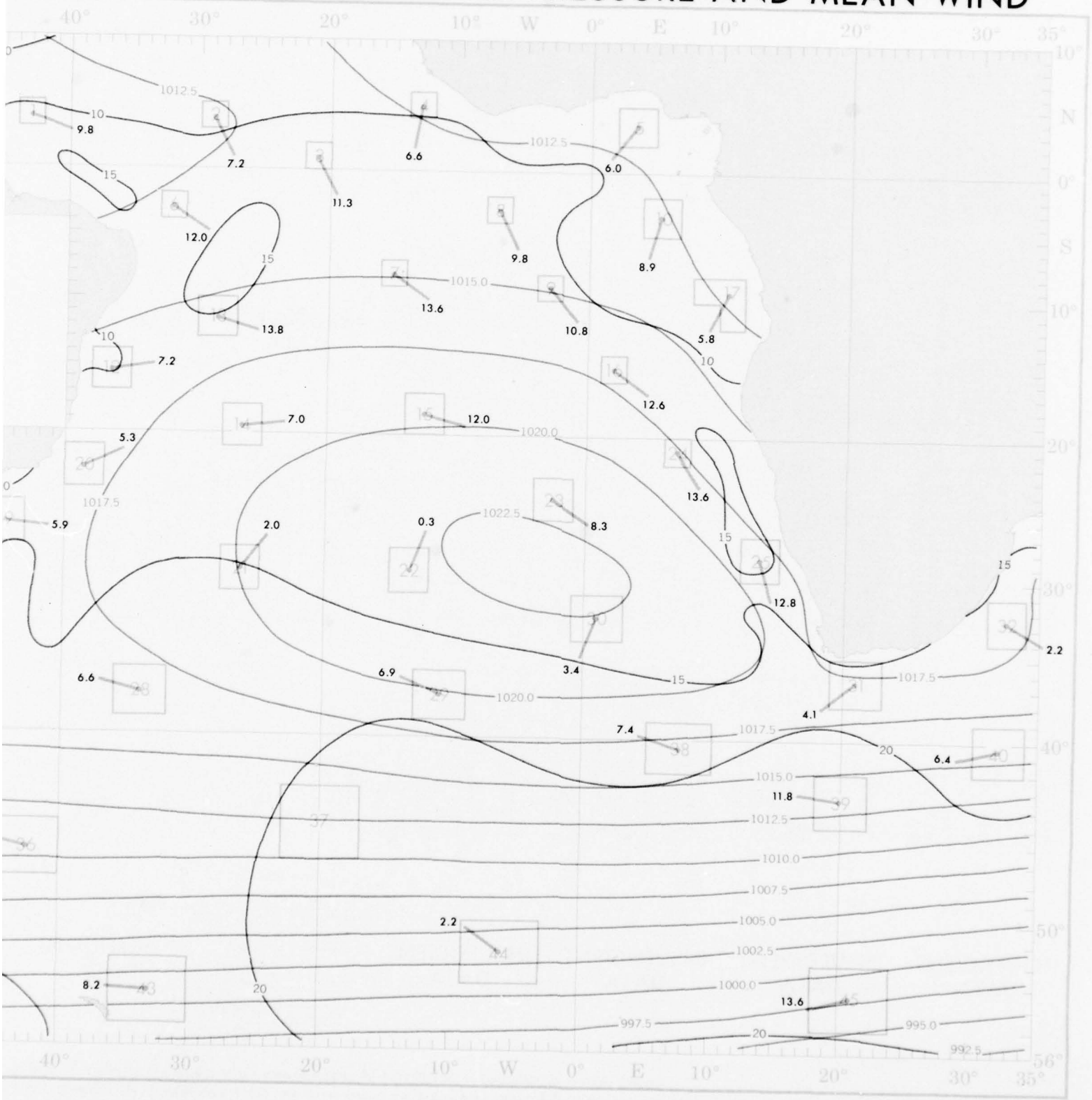
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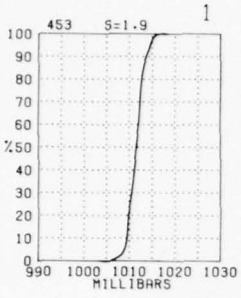
BLUE LINE - Scalar mean wind speed (kts.)

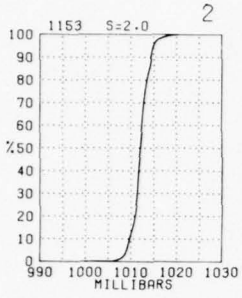
RED LINE - Mean sea level pressure (mbs.)

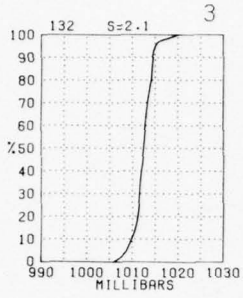
SEA LEVEL PRESSURE AND MEAN WIND

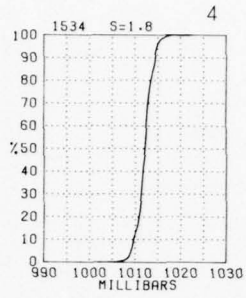


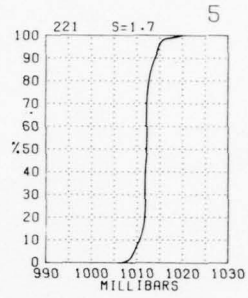
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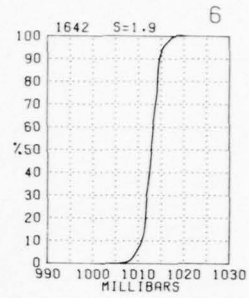


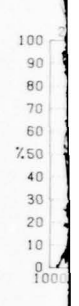


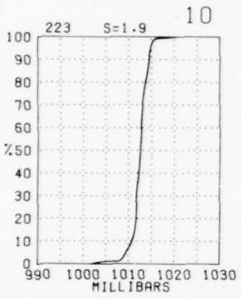


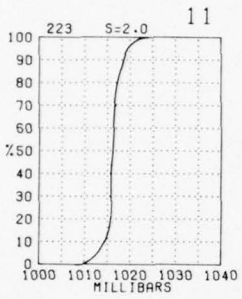


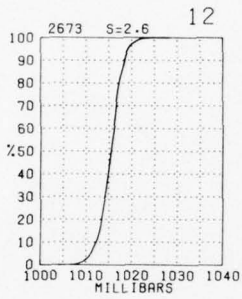


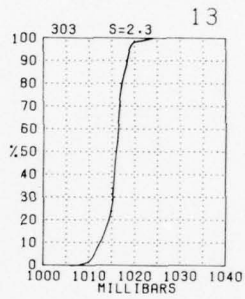


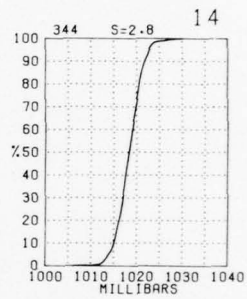


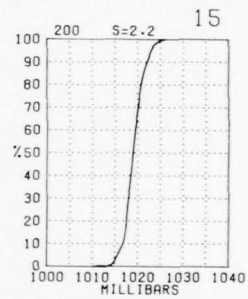


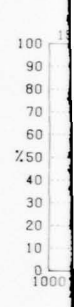


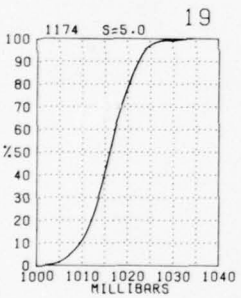


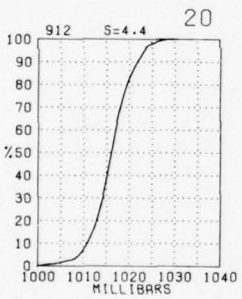


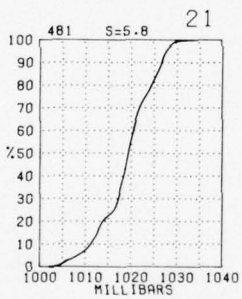


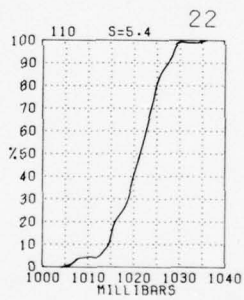


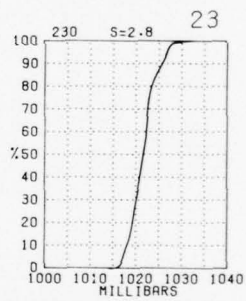


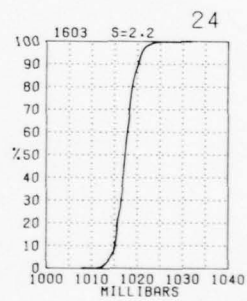


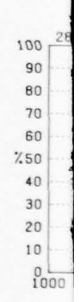


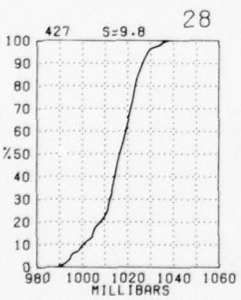


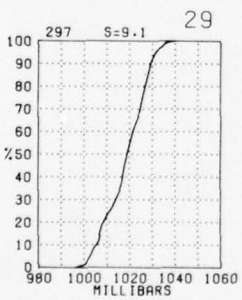


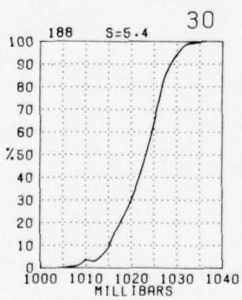


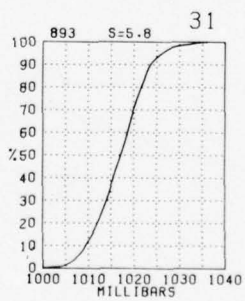


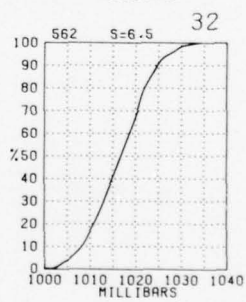


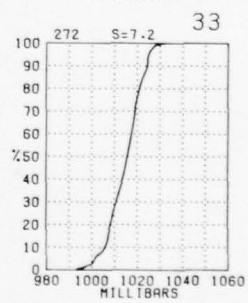


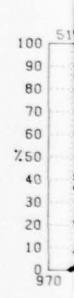






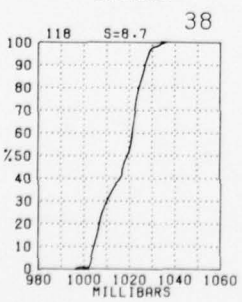


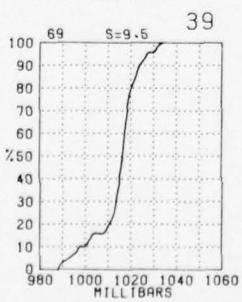


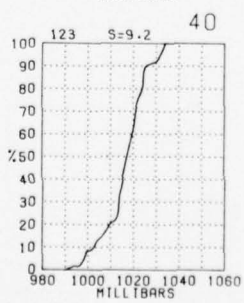


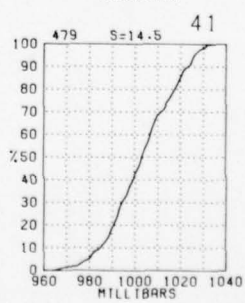
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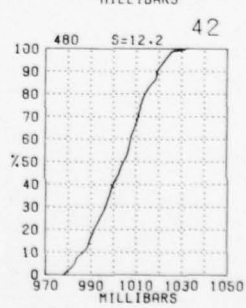
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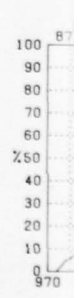






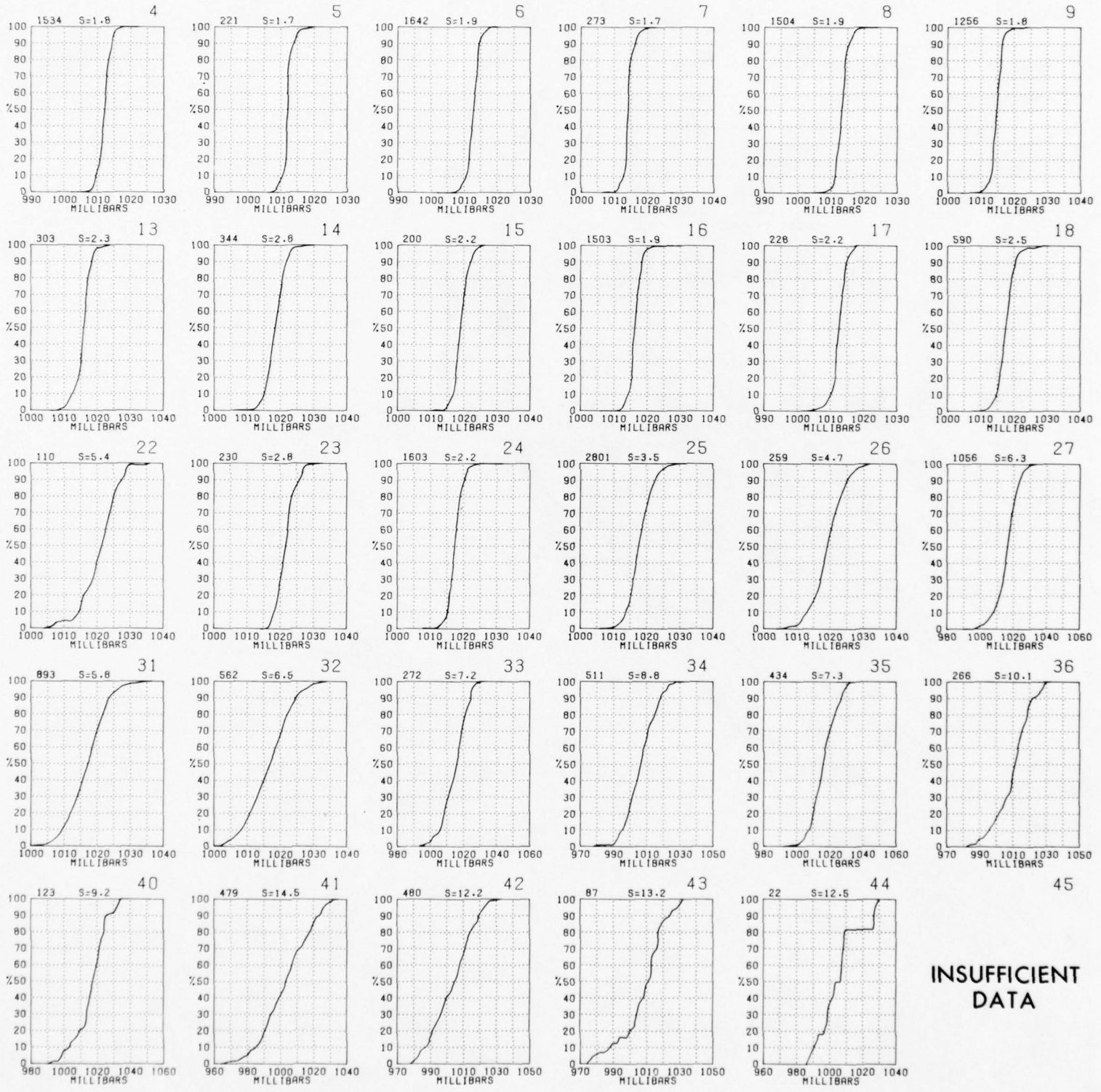






Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

OCTOBER

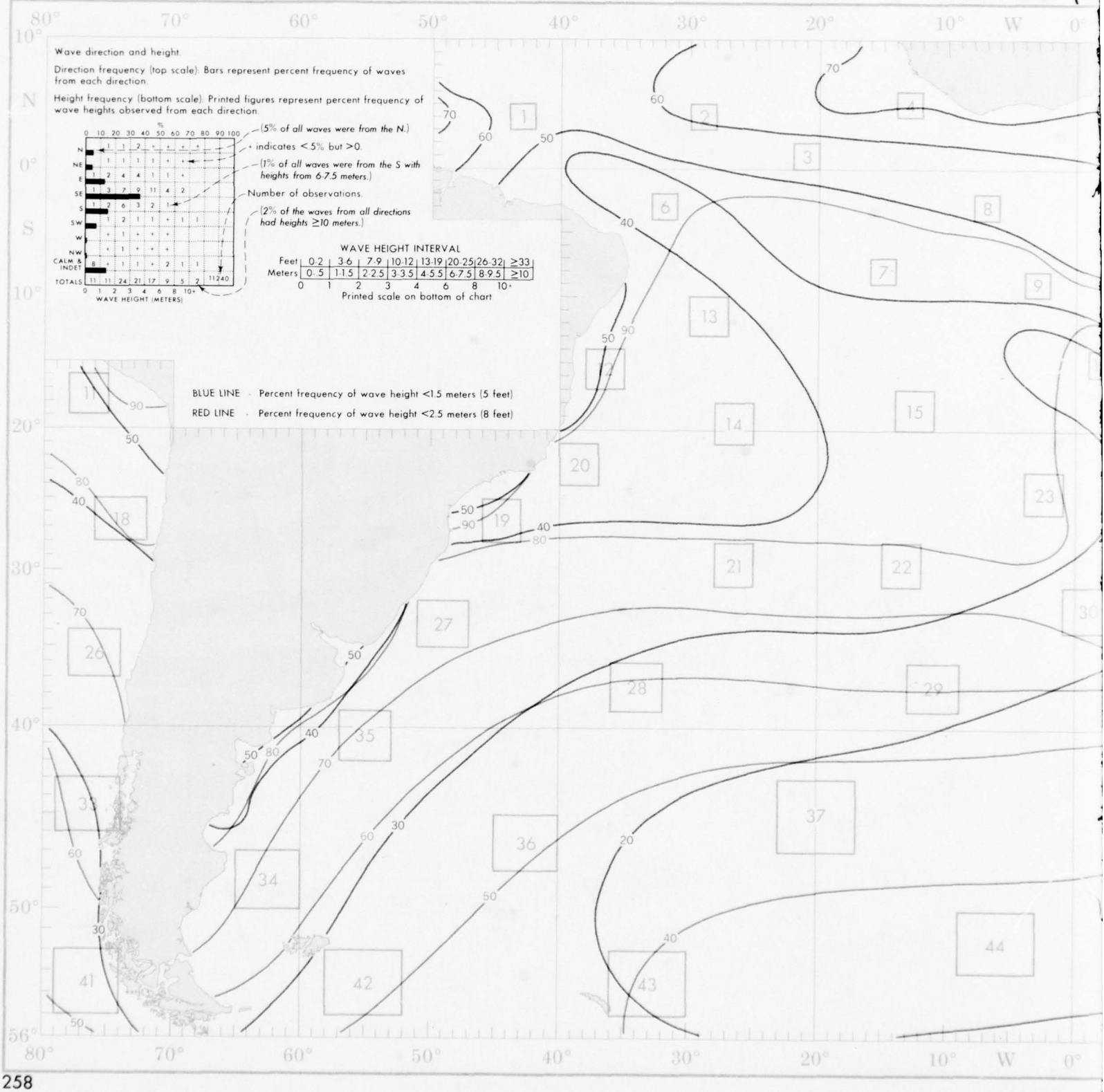


INSUFFICIENT DATA

the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER

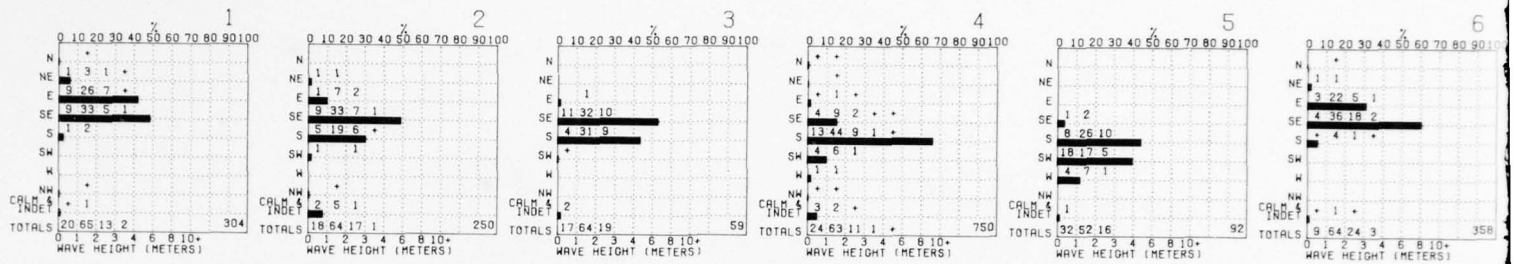
WAVES (<

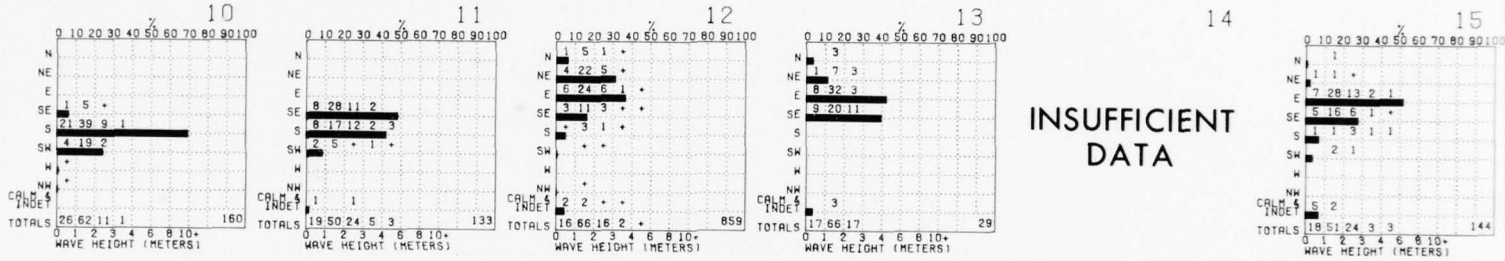


WAVES (<1.5 AND <2.5 METERS)

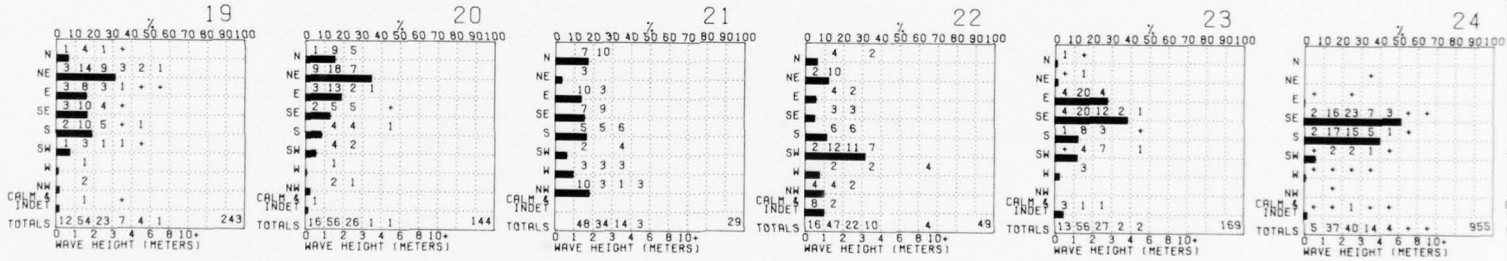


WAVE DIRECTION AND HEIGHT

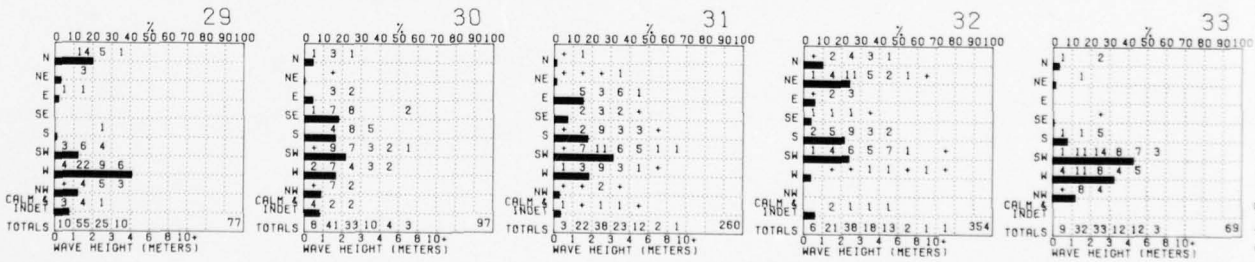




INSUFFICIENT DATA



INSUFFICIENT DATA



INSUFFICIENT DATA

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INSUFFICIENT DATA

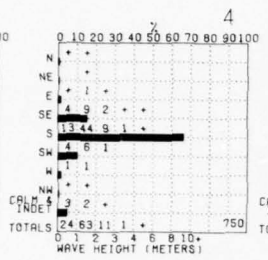
Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

) HEIGHT

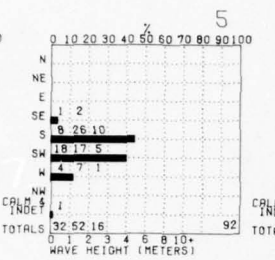
OCTOBER



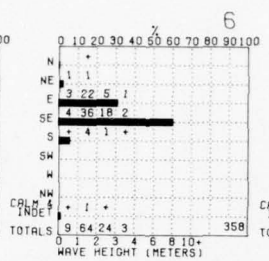
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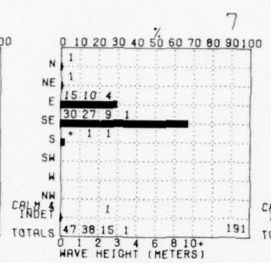
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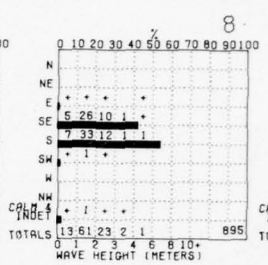
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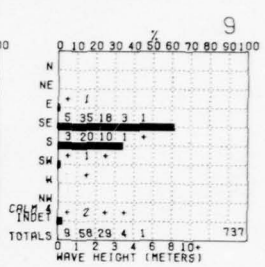
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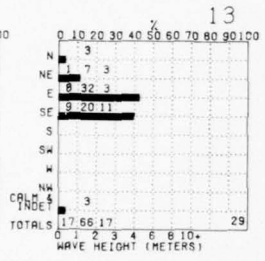
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12



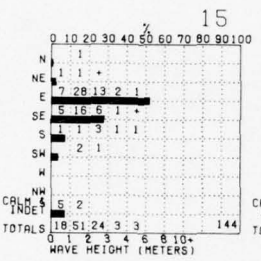
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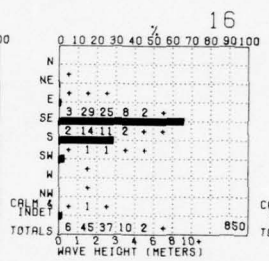
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INSUFFICIENT DATA

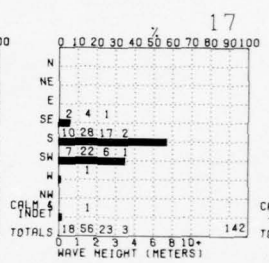
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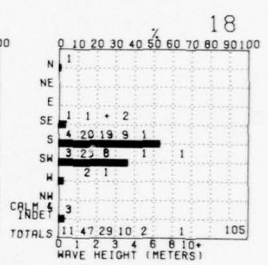
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17



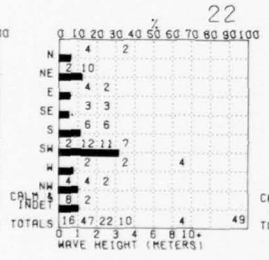
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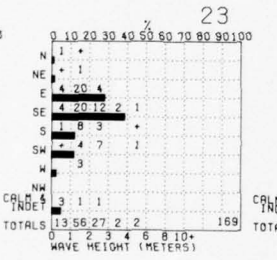
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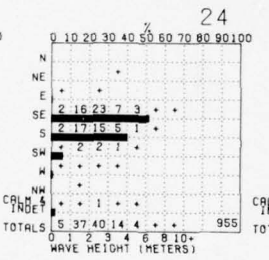
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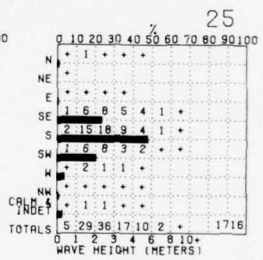
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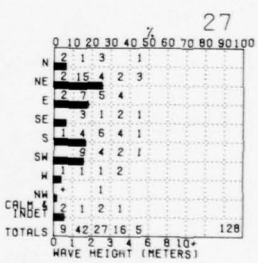
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26

INSUFFICIENT DATA

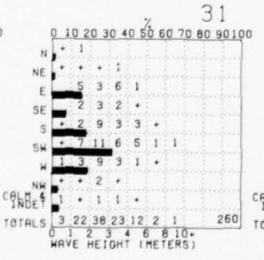
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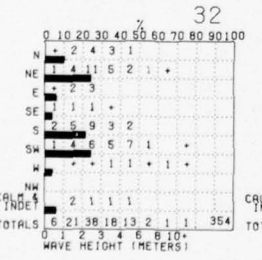
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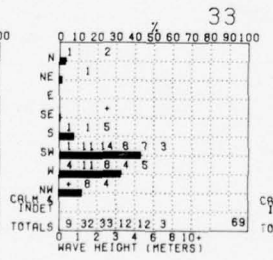
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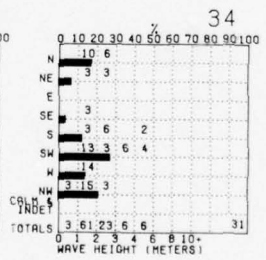
32



33



34



35

INSUFFICIENT DATA

36

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44

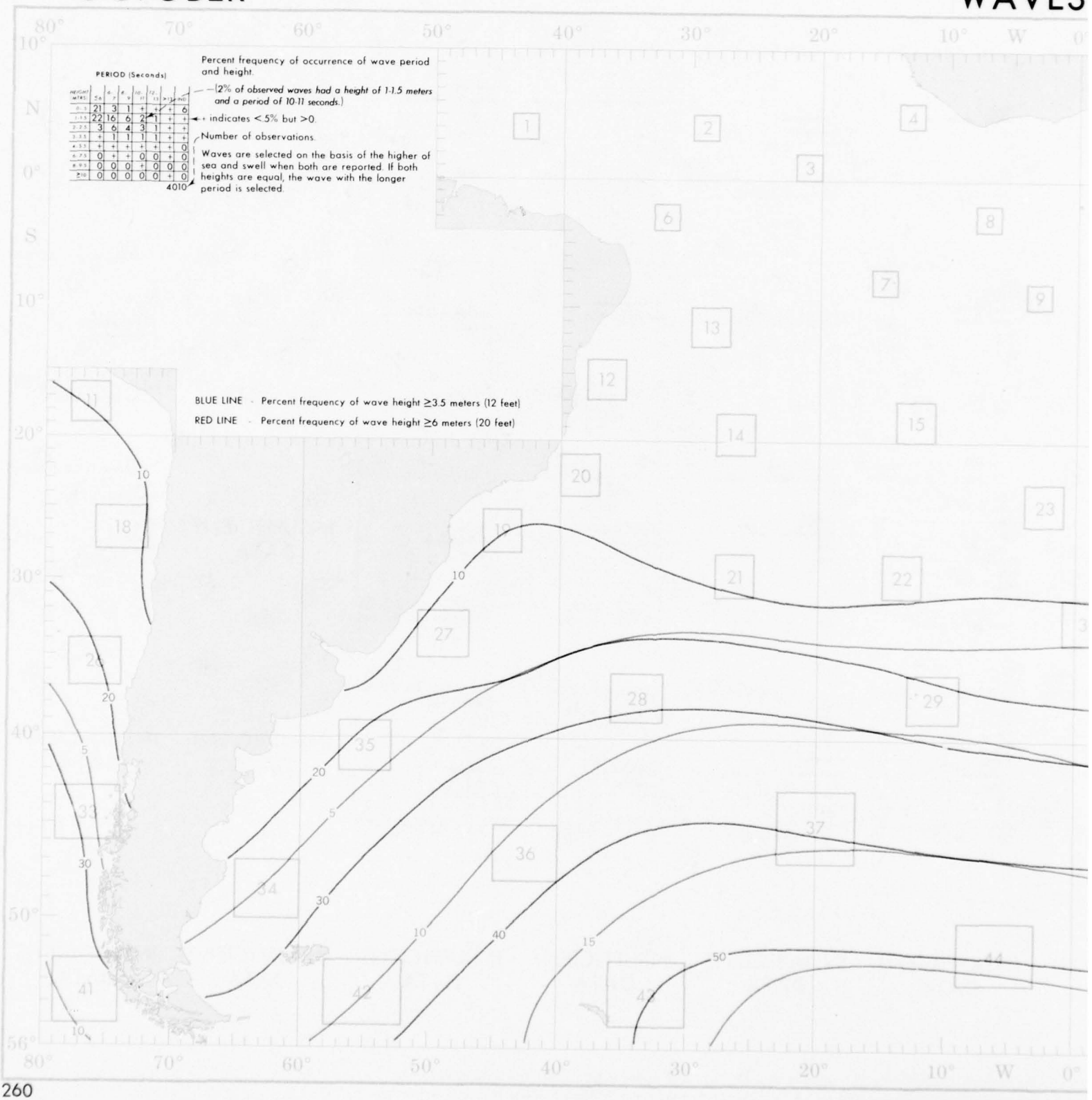
INSUFFICIENT DATA

45

INSUFFICIENT DATA

esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

OCTOBER


PERIOD (Seconds)
HEIGHT (METERS)
5&6
7
8&9
10&11
12&13
>13
INDEF
0-1.5 21 3 1 + + + 6
1.5-3 22 16 6 2 1 + +
2-2.5 3 6 4 3 1 + +
3-3.5 + 1 1 1 1 + +
4-5.5 + + + + + + 0
6-7.5 0 + + 0 0 + 0
8-9.5 0 0 0 + 0 0 0
≥10 0 0 0 0 0 + 0
4010
Percent frequency of occurrence of wave period and height.
(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)
+ indicates < 5% but >0.
Number of observations.
Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.
BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)
RED LINE - Percent frequency of wave height ≥6 meters (20 feet)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
N
S
10°
20°
30°
40°
50°
56°
1
2
3
4
6
7
8
9
11
12
13
14
15
18
20
21
22
23
27
28
29
33
34
35
36
37
41
42
43
44
10
20
5
30
40
50
15

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	1	1	1	0	0	1
1-1.5	25	28	6	1	1	+	3
2-2.5	3	5	4	1	0	0	1
3-3.5	0	1	+	0	0	0	+
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

307

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	+	0	0	0	5
1-1.5	22	22	8	+	0	0	10
2-2.5	4	5	2	2	1	1	2
3-3.5	0	0	+	+	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

255

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	0	2	0	0	0	2
1-1.5	43	>12	5	0	2	0	2
2-2.5	8	3	3	2	0	0	2
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

60

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	2	1	+	0	0	6
1-1.5	23	20	6	2	2	1	8
2-2.5	2	5	2	+	1	+	1
3-3.5	0	1	+	+	0	0	+
4-5.5	0	0	+	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

770

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	26	3	1	0	0	0	3
1-1.5	14	21	5	0	0	0	11
2-2.5	1	4	6	1	0	0	3
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

95

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	0	0	0	0	3
1-1.5	26	24	5	1	0	+	9
2-2.5	6	12	3	1	+	+	1
3-3.5	+	1	0	1	0	+	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

360

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	6	1	0	0	0	3
1-1.5	24	17	10	2	6	0	2
2-2.5	1	2	6	0	1	1	0
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

161

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	3	1	0	0	0	5
1-1.5	16	19	7	3	1	0	3
2-2.5	0	9	7	4	1	0	3
3-3.5	0	0	2	1	1	0	0
4-5.5	0	1	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

136

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	+	0	0	0	3
1-1.5	30	22	6	1	1	+	5
2-2.5	3	6	4	1	+	1	1
3-3.5	+	+	+	+	0	0	+
4-5.5	0	+	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

877

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	0	0	0	0	0	0
1-1.5	31	21	10	0	0	0	3
2-2.5	3	7	7	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

29

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	1	0	0	6
1-1.5	27	17	5	0	1	0	0
2-2.5	3	6	9	2	3	1	0
3-3.5	1	0	1	1	1	0	0
4-5.5	0	0	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

149

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	1	+	0	0	0
1-1.5	24	22	2	2	+	+	2
2-2.5	4	7	10	1	0	0	1
3-3.5	+	2	1	1	0	0	1
4-5.5	0	1	3	0	0	0	0
6-7.5	0	0	1	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

244

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	15	1	0	0	0	0	2
1-1.5	20	27	5	2	0	1	1
2-2.5	3	9	10	1	1	0	1
3-3.5	1	0	0	0	0	0	0
4-5.5	1	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

148

21

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	21	24	0	3	0	0	0
2-2.5	7	10	3	7	0	7	0
3-3.5	0	10	0	0	3	0	0
4-5.5	0	0	0	0	3	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

29

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	10
1-1.5	18	20	2	0	0	0	6
2-2.5	0	6	2	10	4	0	0
3-3.5	0	2	2	4	0	0	2
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	4	0	0	0
>10	0	0	0	0	0	0	0

49

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	0	1	0	0	0	4
1-1.5	28	14	9	2	1	0	1
2-2.5	2	8	8	6	3	0	0
3-3.5	1	0	1	0	0	1	0
4-5.5	1	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

173

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	+	+	0	0	+
1-1.5	12	12	5	2	1	1	4
2-2.5	8	13	8	5	2	1	3
3-3.5	1	3	4	2	2	+	1
4-5.5	+	1	1	1	+	+	+
6-7.5	0	0	+	+	0	0	0
8-9.5	0	0	+	0	0	+	0
>10	0	0	0	0	0	0	0

956

28

INSUFFICIENT DATA

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	4	3	0	0	0	3
1-1.5	12	23	6	3	8	0	3
2-2.5	9	8	3	1	3	0	1
3-3.5	3	4	0	3	0	1	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

77

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	0	0	0	0	6
1-1.5	11	16	7	0	3	0	3
2-2.5	2	9	9	6	0	0	6
3-3.5	0	0	2	4	3	1	0
4-5.5	1	0	1	0	0	1	1
6-7.5	0	0	0	2	1	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

100

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	2
1-1.5	8	7	2	2	0	0	2
2-2.5	4	11	13	2	2	+	6
3-3.5	3	2	8	5	2	1	3
4-5.5	+	1	4	3	1	1	1
6-7.5	0	0	1	+	+	0	0
8-9.5	0	0	0	1	+	0	0
>10	0	0	0	0	0	0	0

262

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	1	0	0	0	+
1-1.5	10	6	3	+	+	0	3
2-2.5	5	12	11	4	1	1	4
3-3.5	2	6	5	1	1	1	3
4-5.5	1	3	3	3	1	1	2
6-7.5	0	0	1	+	1	0	0
8-9.5	0	+	0	0	0	+	+
>10	0	0	+	0	0	+	0

354

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	4	0	0	0	0	3
1-1.5	10	17	3	0	0	0	1
2-2.5	0	9	14	9	0	0	1
3-3.5	0	6	1	4	0	0	0
4-5.5	0	0	4	4	3	0	0
6-7.5	0	0	0	3	0	0	0
8-9.5	0	0	0	0	0	0	0
>10	0	0	0	0	0	0	0

69

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

OCTOBER

4

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	2	1	+	0	0	6
1-1.5	23	20	6	2	2	1	8
2-2.5	2	5	2	+	1	+	1
3-3.5	0	1	+	+	0	0	+
4-5.5	0	0	+	0	0	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

770

5

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	26	3	1	0	0	0	3
1-1.5	14	21	5	0	0	0	11
2-2.5	1	4	6	1	0	0	3
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

95

6

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	1	0	0	0	0	3
1-1.5	26	24	5	1	0	+	9
2-2.5	6	12	3	1	+	+	1
3-3.5	+	1	0	1	0	+	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

360

7

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	47	0	0	0	0	0	0
1-1.5	27	8	2	1	0	0	1
2-2.5	4	9	1	1	0	1	0
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

192

8

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	+	+	0	0	3
1-1.5	21	19	9	2	2	+	7
2-2.5	4	9	4	2	1	+	1
3-3.5	0	2	+	+	0	+	+
4-5.5	+	+	0	+	0	+	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

909

9

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	+	+	+	0	0	2
1-1.5	21	16	9	2	3	1	7
2-2.5	5	11	7	3	1	+	2
3-3.5	+	1	1	1	+	+	+
4-5.5	0	+	+	0	+	0	+
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

743

13

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	0	0	0	0	0	0
1-1.5	31	21	10	0	0	0	3
2-2.5	3	7	7	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

29

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	0	1	0	0	6
1-1.5	27	17	5	0	1	0	0
2-2.5	3	6	9	2	3	1	0
3-3.5	1	0	1	1	1	0	0
4-5.5	0	0	1	0	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

16

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	+	+	0	0	1
1-1.5	14	14	7	1	2	1	6
2-2.5	5	14	9	5	2	1	2
3-3.5	+	3	3	1	1	+	1
4-5.5	+	+	+	1	+	+	+
6-7.5	0	0	+	+	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

856

17

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	1	1	1	0	0	1
1-1.5	21	19	8	5	1	0	1
2-2.5	4	8	7	1	0	0	3
3-3.5	0	2	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

146

18

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	4
1-1.5	9	23	9	1	1	0	2
2-2.5	6	4	9	6	1	2	1
3-3.5	0	0	5	5	1	0	0
4-5.5	0	0	1	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	1	0	0
≥10	0	0	0	0	0	0	0

109

22

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	6	0	0	0	0	0	10
1-1.5	18	20	2	0	0	0	6
2-2.5	0	6	2	10	4	0	0
3-3.5	0	2	2	4	0	0	2
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	4	0	0	0
≥10	0	0	0	0	0	0	0

49

23

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	0	1	0	0	0	4
1-1.5	28	14	9	2	1	0	1
2-2.5	2	8	8	6	3	0	0
3-3.5	1	0	1	0	0	1	0
4-5.5	1	1	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

173

24

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	1	+	+	0	0	+
1-1.5	12	12	5	2	1	1	4
2-2.5	8	13	8	5	2	1	3
3-3.5	1	3	4	2	2	+	1
4-5.5	+	1	1	1	+	+	+
6-7.5	0	0	+	+	0	0	0
8-9.5	0	0	+	0	0	+	0
≥10	0	0	0	0	0	0	0

956

25

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	+	0	0	1
1-1.5	10	9	5	1	1	+	3
2-2.5	6	10	9	4	2	1	4
3-3.5	1	4	5	3	2	1	2
4-5.5	1	3	3	2	1	1	1
6-7.5	0	+	1	+	+	+	+
8-9.5	0	+	+	+	+	0	0
≥10	0	0	0	0	0	0	0

1726

26

INSUFFICIENT DATA

27

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	2	0	0	0	0	3
1-1.5	20	15	5	1	0	0	1
2-2.5	4	11	5	6	0	0	2
3-3.5	2	6	3	2	0	1	2
4-5.5	0	1	2	0	0	3	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

131

31

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	2
1-1.5	8	7	2	2	0	0	2
2-2.5	4	11	13	2	2	+	6
3-3.5	3	2	8	5	2	1	3
4-5.5	+	1	4	3	1	1	1
6-7.5	0	0	1	+	+	0	0
8-9.5	0	0	0	1	+	0	0
≥10	0	0	0	0	0	0	0

262

32

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	1	0	0	0	+
1-1.5	10	6	3	+	+	0	3
2-2.5	5	12	11	4	1	1	4
3-3.5	2	6	5	1	1	1	3
4-5.5	1	3	3	3	1	1	2
6-7.5	0	0	1	+	1	0	0
8-9.5	0	+	0	0	0	+	+
≥10	0	0	+	0	0	+	0

354

33

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	1	4	0	0	0	0	3
1-1.5	10	17	3	0	0	0	1
2-2.5	0	9	14	9	0	0	1
3-3.5	0	6	1	4	0	0	0
4-5.5	0	0	4	4	3	0	0
6-7.5	0	0	0	3	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

69

34

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	0	0	0	0	0	0
1-1.5	19	39	3	0	0	0	0
2-2.5	0	6	10	6	0	0	0
3-3.5	0	3	3	0	0	0	0
4-5.5	0	3	0	0	3	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

31

35

INSUFFICIENT DATA

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

INSUFFICIENT DATA

43

INSUFFICIENT DATA

44

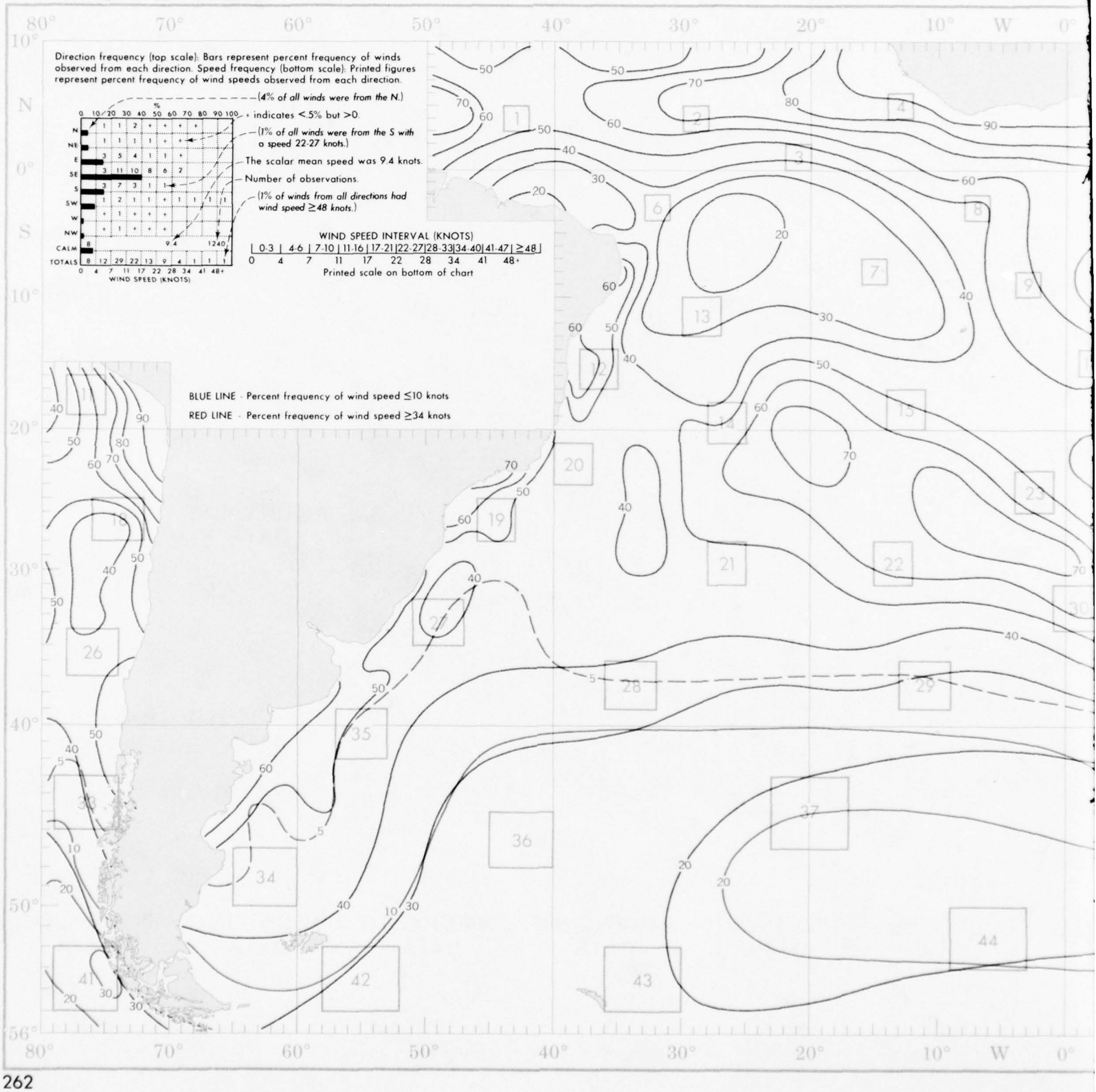
INSUFFICIENT DATA

45

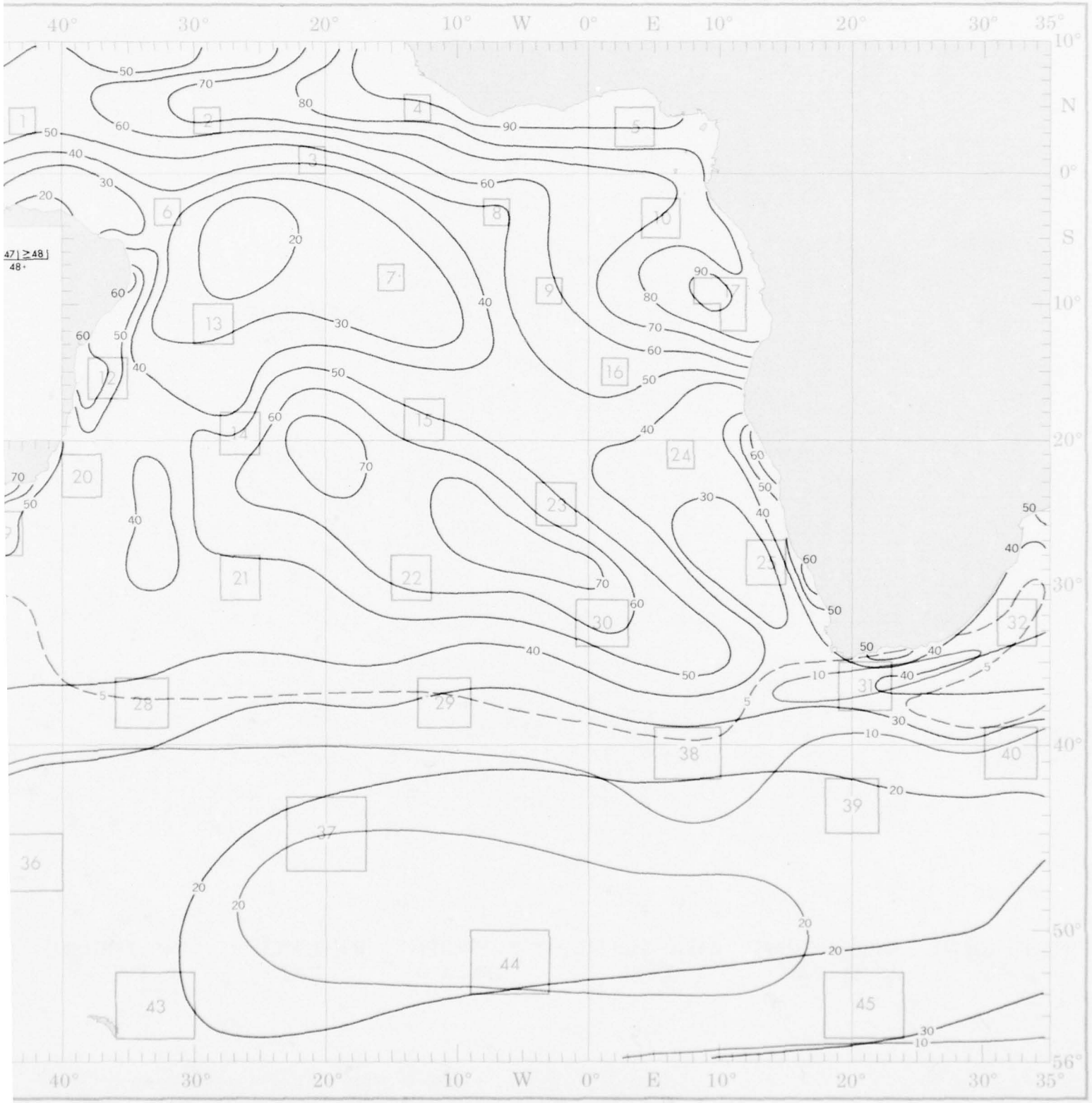
INSUFFICIENT DATA

he objective compilation of available data for specified areas without regard to suspected biases.
es (opposite page) are based on all available data subjectively adjusted where bias was evident.

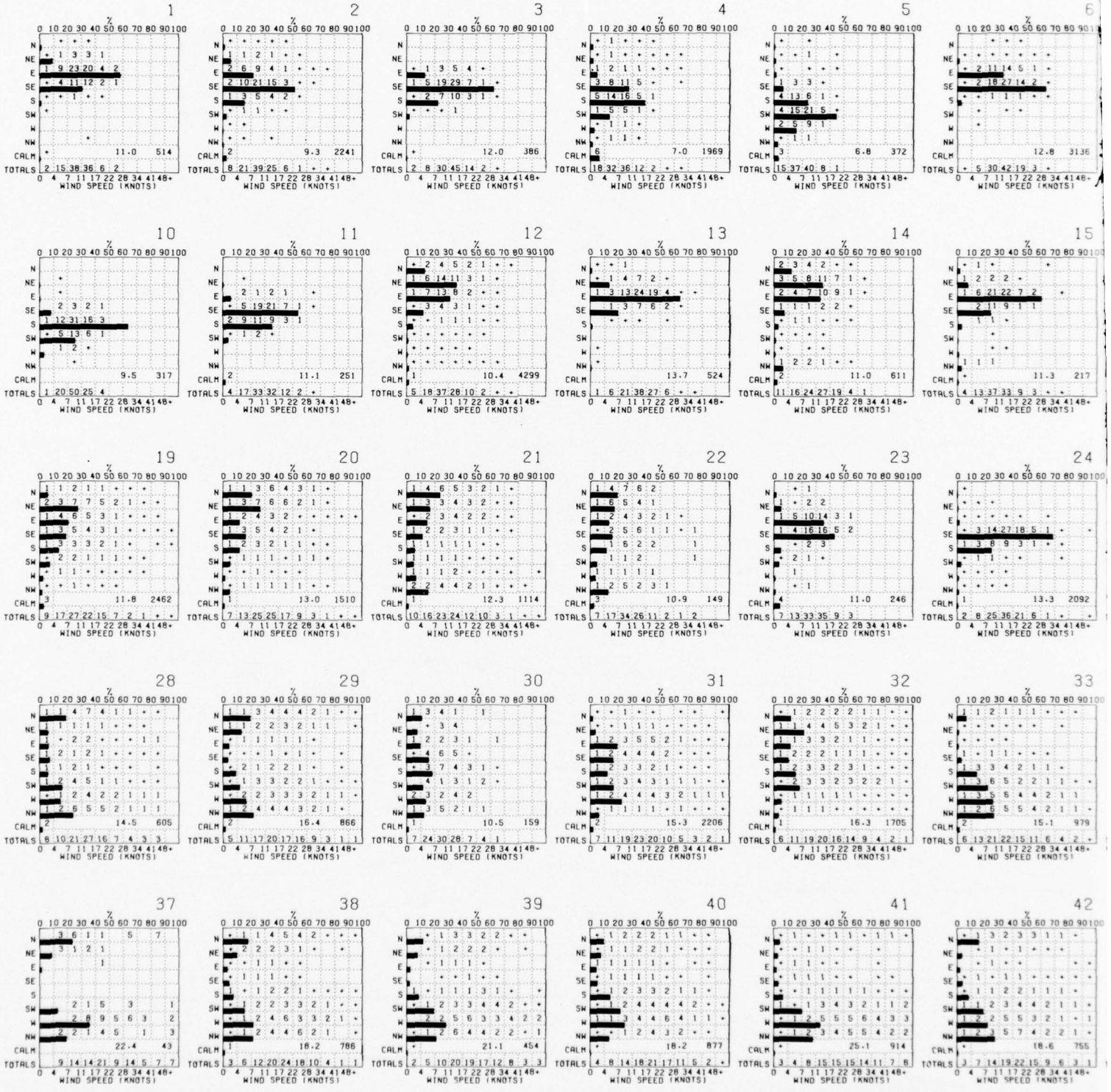
NOVEMBER


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates <.5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
N
NE
E
SE
S
SW
W
NW
CALM
TOTALS
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

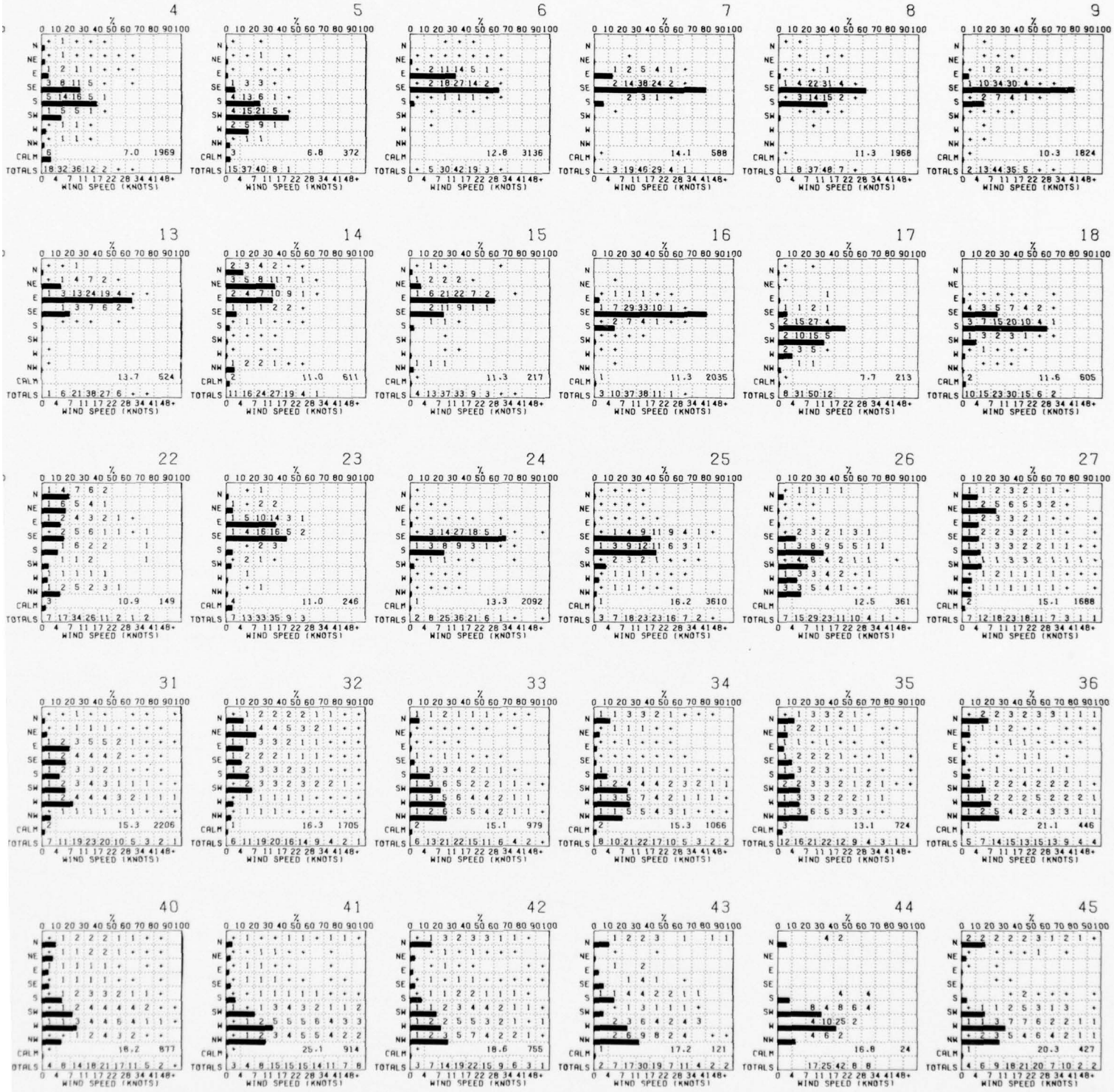
SURFACE WINDS



WIND DIRECTION AND SPEED

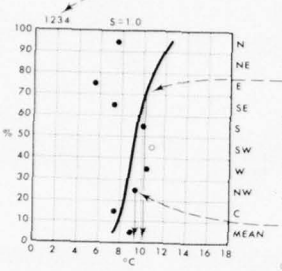


Graphs represent the objective compilation of available data for specified areas without regard t
The isopleth analyses (opposite page) are based on all available data subjectively adjusted wher



...e objective compilation of available data for specified areas without regard to suspected biases.
...s (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Cumulative percent frequency of temperatures equal to or less than the temperature intersected by the curve.

(70% of all temperatures were ≤10.3 °C or ≤50.5 °F.)

S=Standard deviation of temperatures (°C).

Mean temperature for each wind direction, calm and for all data combined are represented by dots.

(With NW winds, the mean temperature was 9.4 °C or 48.9 °F.)

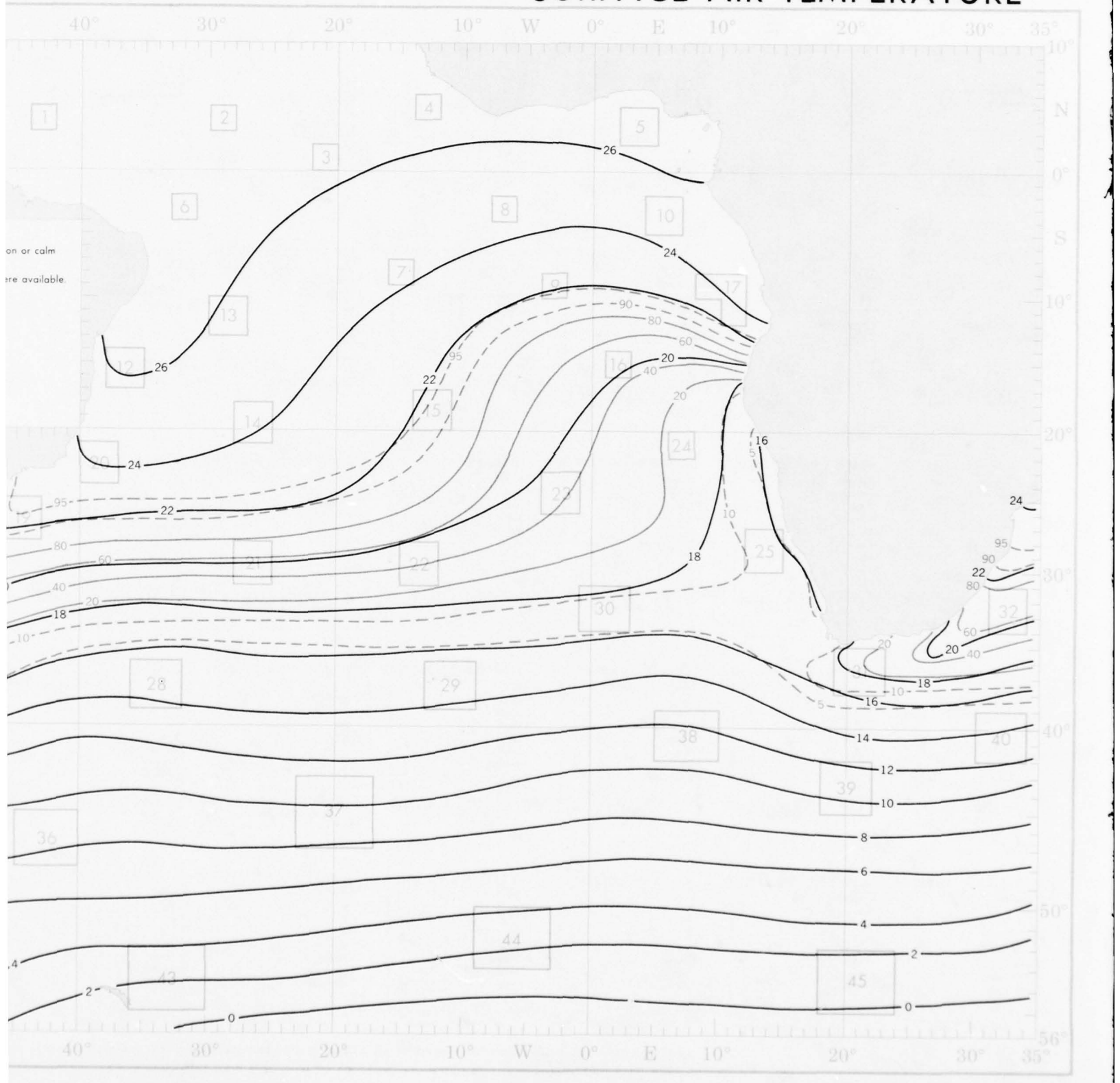
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.

The mean temperature is omitted when less than 10 observations for a direction or calm were available.

BLACK LINE - Mean air temperature (°C)

RED LINE - Percent frequency of temperature ≥20°C (68°F)

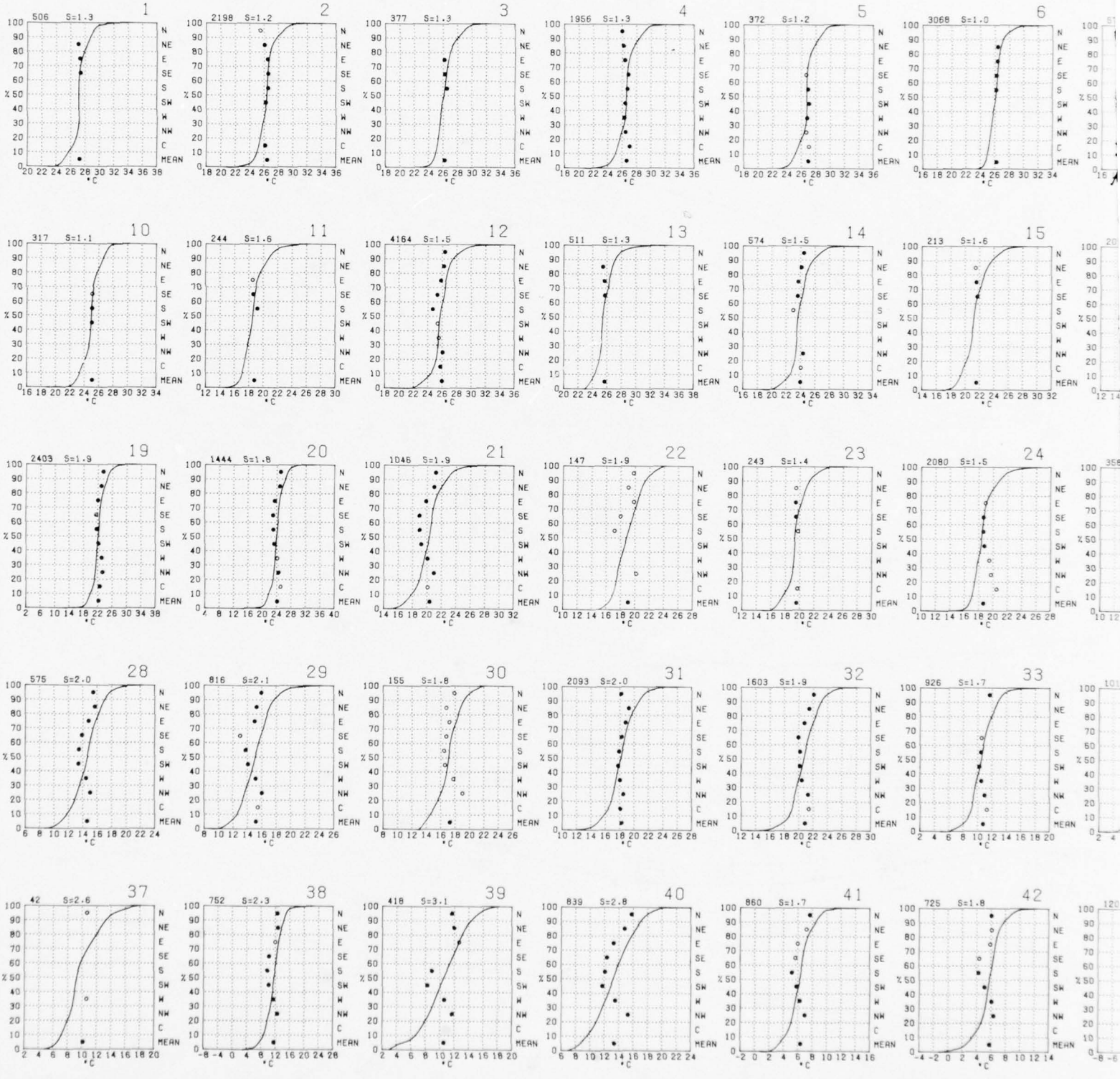
SURFACE AIR TEMPERATURE



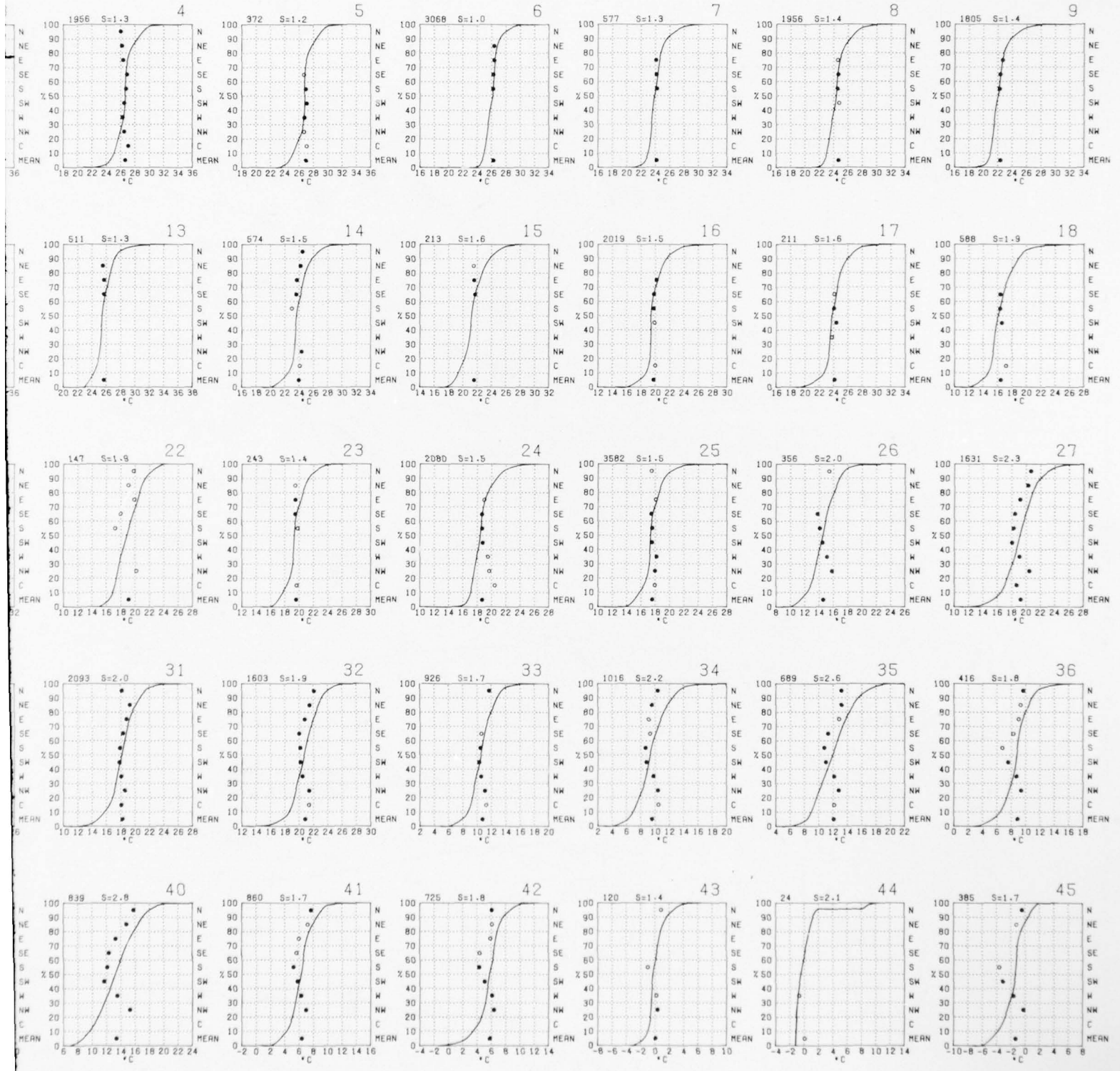
on or calm

ere available.

SURFACE AIR TEMPERATURE



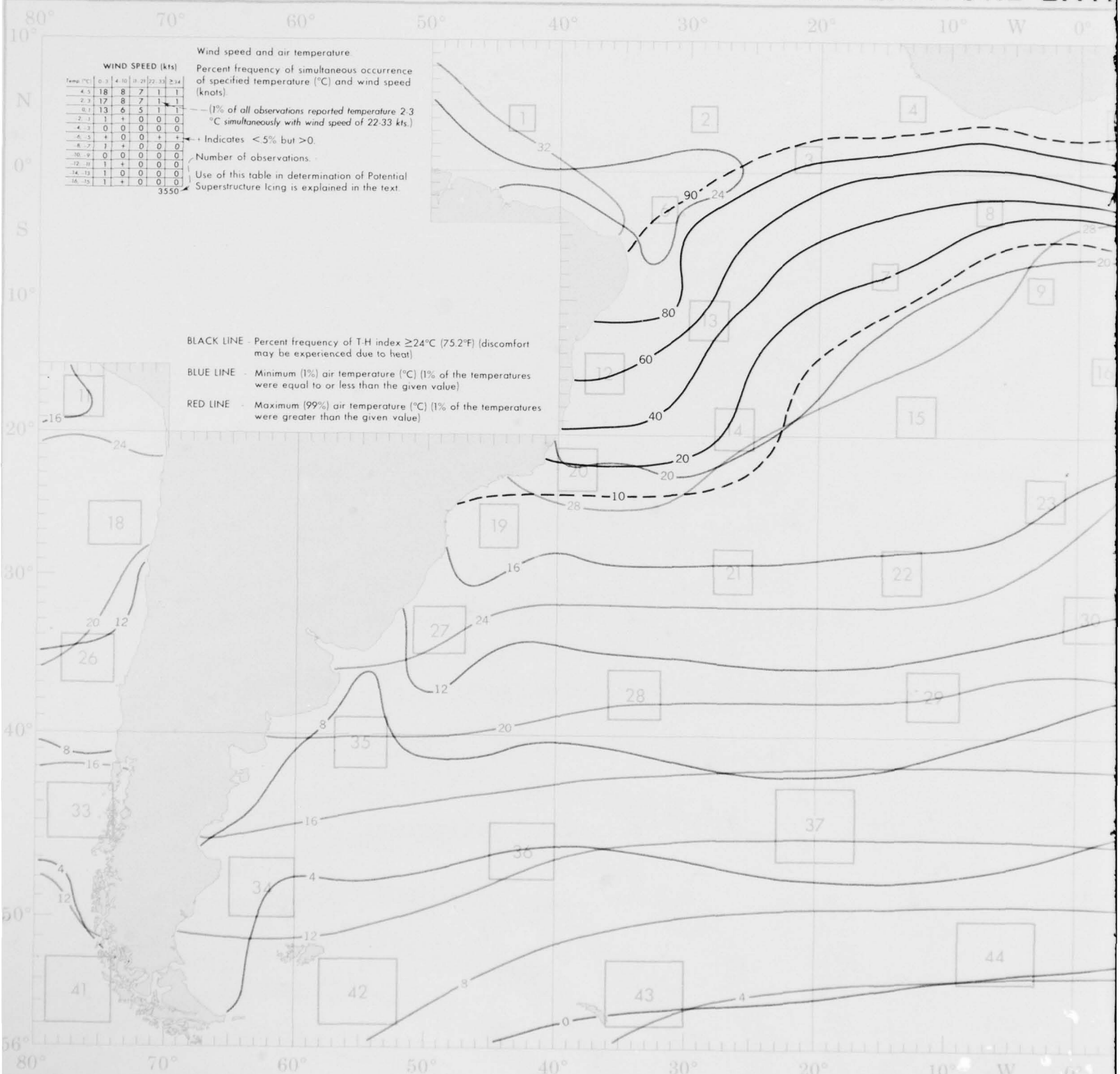
Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias



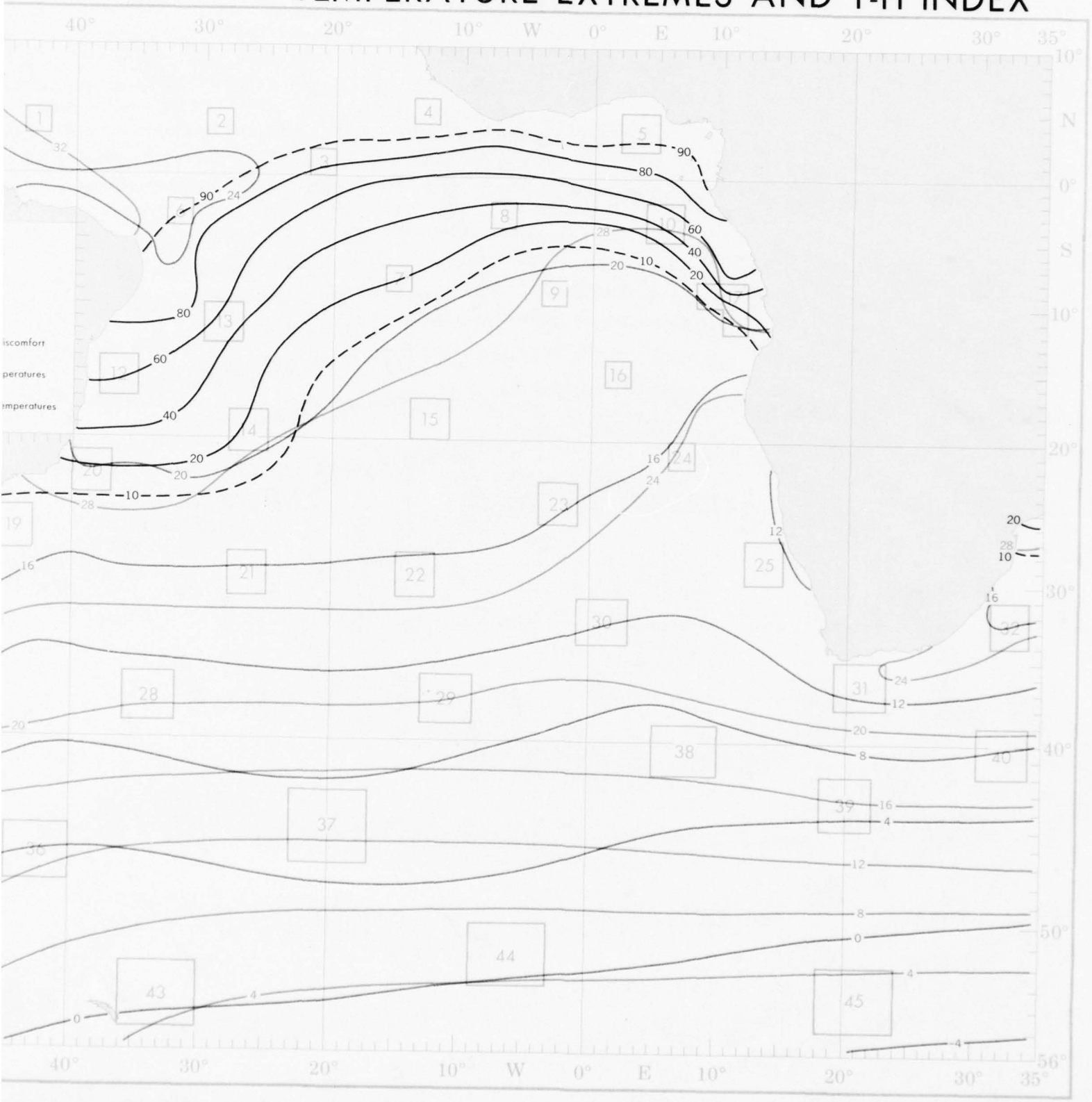
nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER

TEMPERATURE EXTR



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	3	2	0	0
28.29	1	17	19	1	0
26.27	2	31	19	1	0
24.25	0	2	2	1	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

506

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	+	0
30.31	+	1	1	0	0
28.29	1	10	6	+	0
26.27	5	39	20	1	0
24.25	2	8	4	+	+
22.23	+	+	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2210

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	1	0	0
28.29	+	4	11	+	0
26.27	1	20	36	1	0
24.25	1	12	10	+	0
22.23	0	0	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

377

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	1	+	0	0
28.29	5	13	2	0	0
26.27	12	44	8	+	0
24.25	2	7	2	+	0
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2035

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	1	2	+	0	0
28.29	3	20	4	0	0
26.27	10	49	4	0	0
24.25	2	3	1	0	0
22.23	+	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

375

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	
30.31	+	+	+	+	
28.29	+	4	7	+	
26.27	+	26	46	2	
24.25	0	5	8	1	
22.23	0	+	+	+	
20.21	0	0	+	0	
18.19	0	0	0	0	
16.17	0	0	0	0	
14.15	0	0	0	0	
12.13	0	0	0	0	

306

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	2	1	0	0
26.27	+	19	12	0	0
24.25	1	43	16	0	0
22.23	0	5	1	0	0
20.21	0	+	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

317

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	0	+	+	0	0
22.23	+	2	2	0	0
20.21	1	8	10	1	0
18.19	2	29	24	2	0
16.17	+	9	7	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

244

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	+	+	+	0	0
32.33	+	+	+	0	0
30.31	+	1	1	+	0
28.29	+	6	4	+	0
26.27	2	29	19	1	0
24.25	2	17	12	1	0
22.23	+	2	1	+	+
20.21	0	+	+	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

4179

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	+	0	0
28.29	0	1	4	+	0
26.27	+	11	32	4	+
24.25	+	14	28	2	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

511

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	0	0	0	0
28.29	+	1	1	0	0
26.27	2	7	4	1	0
24.25	4	16	22	2	0
22.23	5	13	18	2	0
20.21	0	1	1	1	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

574

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	2	+	0	
24.25	+	6	3	0	
22.23	2	15	17	+	
20.21	1	26	18	2	
18.19	+	2	2	+	
16.17	0	0	0	+	
14.15	0	0	0	0	
12.13	0	0	0	0	
10.11	0	0	0	0	
8.9	0	0	0	0	
6.7	0	0	0	0	

21

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	+	0	0
28.29	+	+	+	0	0
26.27	1	2	1	+	0
24.25	2	9	7	1	+
22.23	4	19	16	5	+
20.21	2	10	11	3	+
18.19	+	2	2	1	+
16.17	0	+	+	+	0
14.15	0	+	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

2403

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	0	0	0	0
30.31	+	+	+	0	0
28.29	+	1	1	+	0
26.27	1	7	9	2	+
24.25	2	14	19	6	+
22.23	2	13	11	4	1
20.21	+	2	1	+	+
18.19	0	+	+	+	0
16.17	0	0	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1445

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	1	3	2	+	+
22.23	2	10	7	2	+
20.21	3	16	17	6	1
18.19	2	9	9	3	+
16.17	2	2	2	1	0
14.15	0	0	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1046

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	0	0	0
22.23	3	7	4	0	0
20.21	1	12	10	1	0
18.19	3	16	17	1	0
16.17	0	14	5	1	2
14.15	0	1	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

147

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	+	0	0	0
22.23	1	5	3	0	0
20.21	1	18	12	2	0
18.19	5	23	25	1	0
16.17	0	1	2	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

244

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	1	1	0	0
22.23	+	2	2	+	0
20.21	1	7	9	1	0
18.19	1	19	35	4	+
16.17	+	4	11	2	0
14.15	0	+	+	0	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2084

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	+	0	0
20.21	+	1	0	+	0
18.19	1	2	2	1	+
16.17	2	7	12	5	2
14.15	3	12	18	3	2
12.13	2	7	7	2	2
10.11	1	2	3	+	+
8.9	0	0	0	+	+
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

575

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	+	+	+	0
20.21	+	1	1	+	0
18.19	+	3	3	3	0
16.17	2	8	12	8	2
14.15	3	8	12	8	2
12.13	+	5	8	5	+
10.11	0	+	1	+	0
8.9	0	0	0	+	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

817

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	0	0	0
20.21	1	7	2	1	0
18.19	3	18	10	1	0
16.17	2	27	15	1	0
14.15	1	1	7	0	0
12.13	0	0	1	2	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

157

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	0	0	0
24.25	+	+	+	+	+
22.23	+	3	2	+	+
20.21	2	7	6	3	1
18.19	3	12	19	6	2
16.17	2	7	11	4	2
14.15	+	1	3	2	+
12.13	0	+	+	+	+
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2097

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	+	0
24.25	1	2	3	1	+
22.23	3	9	11	7	2
20.21	2	12	15	8	2
18.19	1	6	6	4	2
16.17	+	1	1	1	+
14.15	0	0	+	+	0
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1619

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	0	0	0
16.17	+	+	+	0	0
14.15	+	3	2	1	+
12.13	2	11	10	3	1
10.11	2	15	17	10	3
8.9	1	4	8	4	2
6.7	+	1	1	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

926

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	0	2	0	0
16.17	0	0	0	0	0
14.15	0	0	7	5	2
12.13	0	0	7	0	12
10.11	0	12	0	7	0
8.9	0	7	10	12	2
6.7	0	5	10	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

42

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	+	+	0	0
16.17	+	1	1	1	0
14.15	+	2	7	5	1
12.13	1	6	15	10	2
10.11	1	5	15	7	1
8.9	+	3	4	4	1
6.7	+	1	+	1	1
4.5	0	+	+	0	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0

752

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	1	3	1	0
14.15	+	3	5	3	1
12.13	1	3	9	6	3
10.11	0	4	11	7	4
8.9	0	3	8	6	3
6.7	+	+	4	3	2
4.5	0	+	+	2	1
2.3	0	0	0	2	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

418

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	+	0	0	0
20.21	0	+	+	+	0
18.19	+	1	3	3	+
16.17	+	5	6	4	1
14.15	1	5	10	6	1
12.13	1	6	10	8	2
10.11	+	3	6	6	2
8.9	+	1	3	2	1
6.7	0	+	+	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0

839

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	+	+	+	0	0
10.11	+	+	1	+	+
8.9	1	3	8	6	7
6.7	1	5	14	14	10
4.5	+	3	7	8	6
2.3	+	1	1	1	2
0.1	0	0	0	+	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

860

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	+	0
10.11	0	+	1	+	+
8.9	1	3	5	2	+
6.7	2	11	20	12	4
4.5	1	5	12	7	4
2.3	+	+	3	2	1
0.1	+	+	1	+	+
-2.-1	0	+	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

726

Graphs represent the objective compilation of available data for specified areas without regard
The isopleth analyses (opposite page) are based on all available data subjectively adjusted whe

TEMPERATURE

NOVEMBER

3

≥ 34
0
0
0
0
0
0
0
0
0

377

4

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	1	1	+	0	0
28.29	5	13	2	0	0
26.27	12	44	8	+	0
24.25	2	7	2	+	0
22.23	+	+	+	+	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2035

5

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	1	2	+	0	0
28.29	3	20	4	0	0
26.27	10	49	4	0	0
24.25	2	3	1	0	0
22.23	+	1	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

375

6

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	+	+	+	0
28.29	+	4	7	+	0
26.27	+	26	46	2	0
24.25	0	5	8	1	0
22.23	0	+	+	+	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

3068

7

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	1	0	0
28.29	0	1	1	0	0
26.27	+	3	9	0	0
24.25	0	11	40	3	0
22.23	0	7	23	1	0
20.21	0	0	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

577

8

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	+	+	0	0
28.29	0	2	2	0	0
26.27	+	8	10	+	0
24.25	1	27	34	+	0
22.23	+	8	8	+	0
20.21	0	0	0	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1956

9

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	0	0	0
28.29	+	+	+	0	0
26.27	0	2	1	0	0
24.25	1	8	5	0	0
22.23	1	34	24	+	0
20.21	1	13	9	+	0
18.19	0	+	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1817

12

≥ 34
0
0
0
0
0
0
+
0
0

4179

13

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	+	0	0
28.29	0	1	4	+	0
26.27	+	11	32	4	+
24.25	+	14	28	2	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

511

14

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	0	0	0	0	0
28.29	+	1	1	0	0
26.27	2	7	4	1	0
24.25	4	16	22	2	0
22.23	5	13	18	2	0
20.21	0	1	1	1	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

574

15

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	2	+	0	0
24.25	+	6	3	0	0
22.23	2	15	17	+	0
20.21	1	26	18	2	+
18.19	+	2	2	+	0
16.17	0	0	0	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

213

16

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	+	0	0
26.27	0	+	+	0	0
24.25	+	1	1	0	0
22.23	1	5	4	+	0
20.21	1	20	19	+	0
18.19	1	21	24	1	0
16.17	0	+	1	+	0
14.15	0	0	+	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

2030

17

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	1	0	0	0
28.29	0	4	0	0	0
26.27	+	15	1	0	0
24.25	4	36	6	0	0
22.23	2	22	4	0	0
20.21	+	2	0	0	0
18.19	0	0	+	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

211

18

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	+	+	1	0	0
22.23	+	1	+	0	0
20.21	1	2	1	0	0
18.19	3	10	7	1	0
16.17	3	16	18	3	0
14.15	3	9	16	3	0
12.13	+	1	1	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

588

21

≥ 34
0
+
+
1
+
0
0
0
0

1046

22

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	1	0	0	0
22.23	3	7	4	0	0
20.21	1	12	10	1	0
18.19	3	16	17	1	0
16.17	0	14	5	1	2
14.15	0	1	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0

147

23

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	0	0	0
24.25	0	+	0	0	0
22.23	1	5	3	0	0
20.21	1	18	12	2	0
18.19	5	23	25	1	0
16.17	0	1	2	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

244

24

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	+	0	0
24.25	+	1	1	0	0
22.23	+	2	2	+	0
20.21	1	7	9	1	0
18.19	1	19	35	4	+
16.17	+	4	11	2	0
14.15	0	+	+	0	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2084

25

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	+	+	0	0
24.25	+	+	+	+	0
22.23	+	1	1	+	+
20.21	+	3	3	1	+
18.19	1	11	18	7	+
16.17	1	11	23	12	1
14.15	+	1	1	1	+
12.13	0	0	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

3604

26

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	+	0	0	0	0
20.21	+	+	0	+	0
18.19	1	4	1	+	0
16.17	3	13	7	1	+
14.15	2	19	15	4	+
12.13	+	6	9	7	+
10.11	0	3	2	1	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

356

27

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	+	0	0	0
26.27	+	1	+	0	0
24.25	+	1	1	1	+
22.23	1	4	5	2	+
20.21	2	9	14	5	1
18.19	2	10	13	6	2
16.17	1	5	6	2	1
14.15	+	1	1	+	+
12.13	0	0	+	+	+
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1633

30

≥ 34
0
0
0
0
0
0
0
0
0

157

31

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	0	0	0	0
24.25	+	+	+	+	+
22.23	+	3	2	+	+
20.21	2	7	8	3	1
18.19	3	12	19	6	2
16.17	2	7	11	4	2
14.15	+	1	3	2	+
12.13	0	+	+	+	+
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2097

32

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	+	0
24.25	1	2	3	1	+
22.23	3	9	11	7	2
20.21	2	12	15	8	2
18.19	1	6	6	4	2
16.17	+	1	1	1	+
14.16	0	0	+	+	0
12.13	0	0	0	+	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

1619

33

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
18.19	0	+	0	0	0
16.17	+	+	+	0	0
14.15	+	3	2	1	+
12.13	2	11	10	3	1
10.11	2	15	17	10	3
8.9	1	4	8	4	2
6.7	+	1	1	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

926

34

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	+	0	0	0	0
18.19	+	0	0	+	0
16.17	+	+	+	0	0
14.15	+	2	2	+	0
12.13	1	6	5	2	+
10.11	2	9	13	4	1
8.9	3	12	14	6	3
6.7	1	3	5	2	2
4.5	+	+	+	1	+
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0

1016

35

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	+	1	1	+	+
16.17	1	3	2	2	+
14.15	2	6	6	2	1
12.13	3	9	11	4	1
10.11	3	11	10	4	1
8.9	1	5	4	2	1
6.7	1	1	0	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

689

36

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	0	+	0	0	0
14.15	1	0	+	+	0
12.13	0	1	1	2	+
10.11	2	7	7	10	4
8.9	3	12	14	8	10
6.7	0	1	4	4	2
4.5	0	+	+	3	1
2.3	0	0	0	0	+
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

416

39

≥ 34
0
1
3
4
3
2
1
0
0

418

40

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	+	0	0	0
20.21	0	+	+	+	0
18.19	+	1	3	3	+
16.17	+	5	6	4	1
14.15	1	5	10	6	1
12.13	1	6	10	8	2
10.11	+	3	6	6	2
8.9	+	1	3	2	1
6.7	0	+	+	+	+
4.5	0	0	0	0	0
2.3	0	0	0	0	0

839

41

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	+	+	+	0	0
10.11	+	1	1	+	+
8.9	1	3	8	6	7
6.7	1	5	14	14	10
4.5	+	3	7	8	6
2.3	+	1	1	1	2
0.1	0	0	0	+	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

860

42

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	0	+	+	+	0
10.11	0	+	1	+	0
8.9	1	3	5	2	+
6.7	2	11	20	12	4
4.5	1	5	12	7	4
2.3	+	+	3	2	1
0.1	+	+	1	+	1
-2.-1	0	+	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

726

43

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
6.7	0	0	0	0	1
4.5	0	1	0	0	0
2.3	1	3	4	5	2
0.1	0	8	23	8	5
-2.-1	1	13	20	5	0
-4.-3	0	2	1	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0

120

44

WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	4	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	17	21	4	0
-2.-1	0	0	42	13	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

24

45

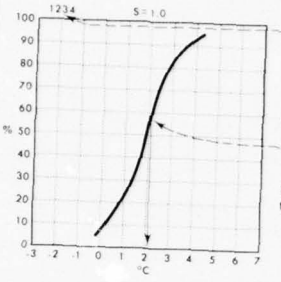
WIND SPEED (KTS)

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
2.3	0	0	1	3	1
0.1	2	4	8	8	3
-2.-1	2	8	18	13	6
-4.-3	1	3	9	3	3
-6.-5	0	1	2	2	1
-8.-7	0	0	0	+	+
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0
-18.-17	0	0	0	0	0

385

ent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Sea surface temperature.

Number of observations.

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

(60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

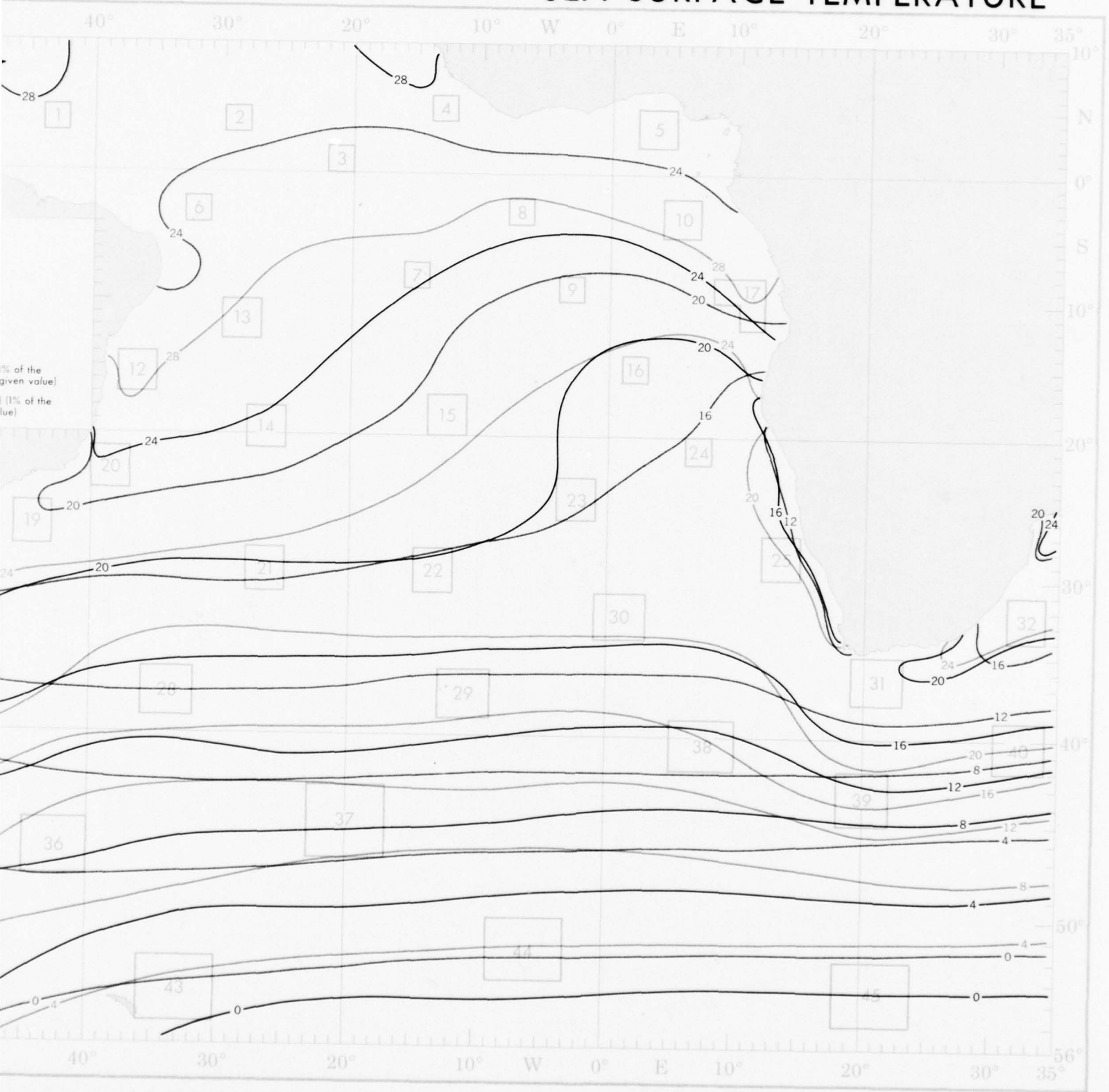
S - Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

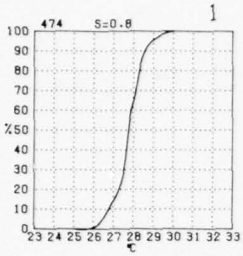
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

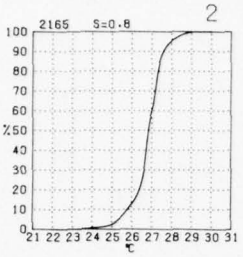
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

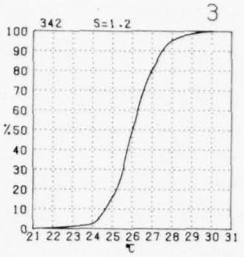
SEA SURFACE TEMPERATURE

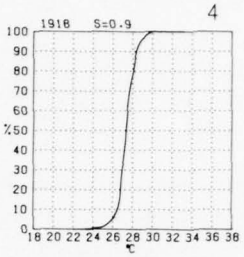


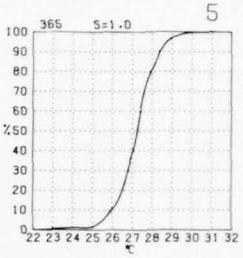
SEA SURFACE TEMPERATURE

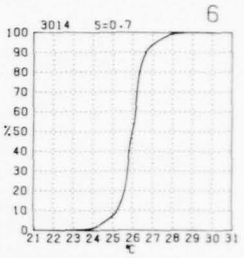


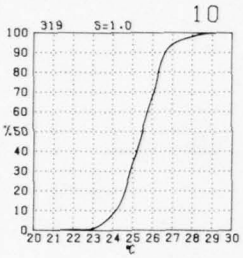


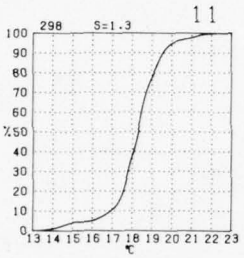


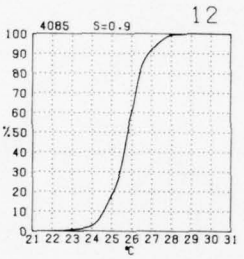


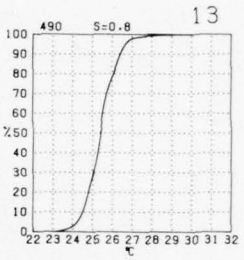


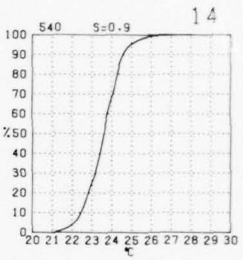


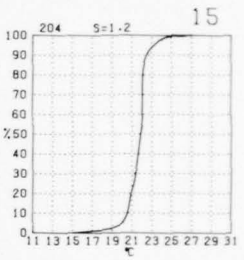


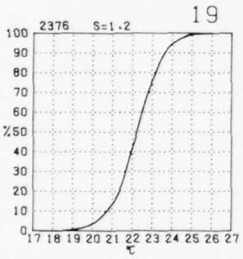


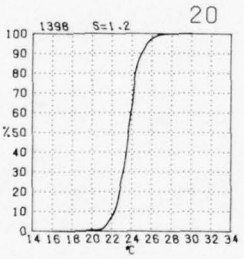


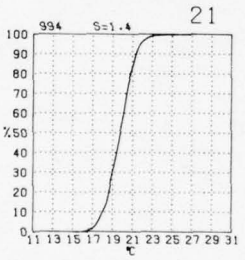


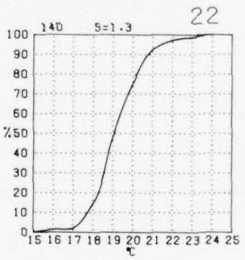


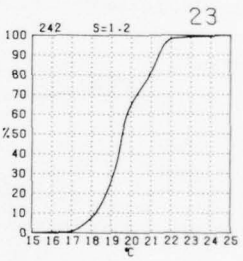


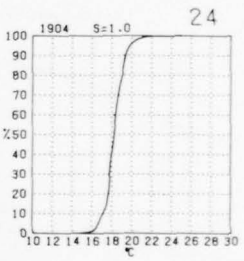


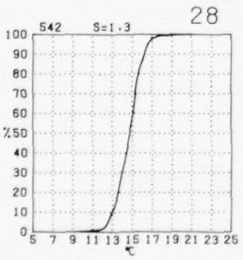


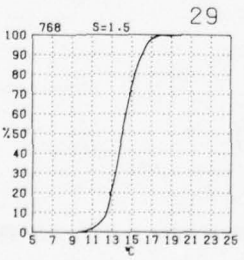


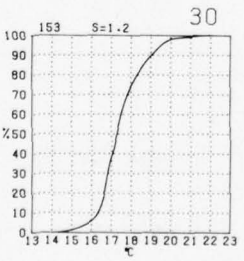


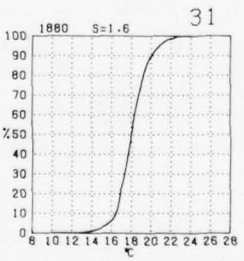


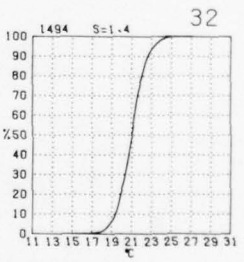


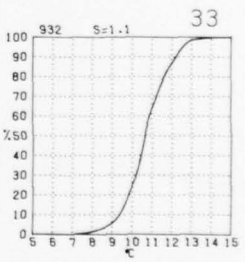


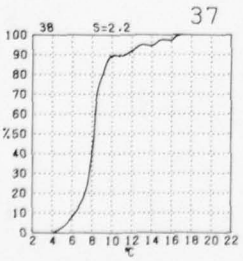


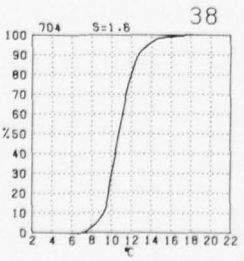


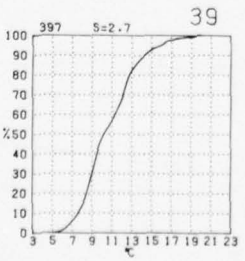


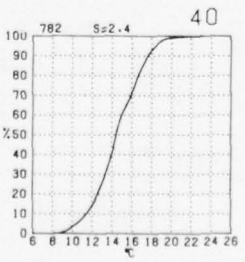


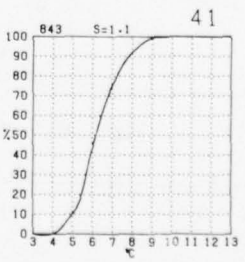


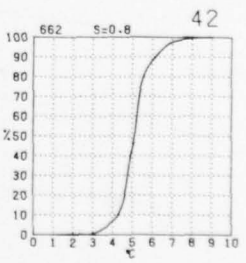








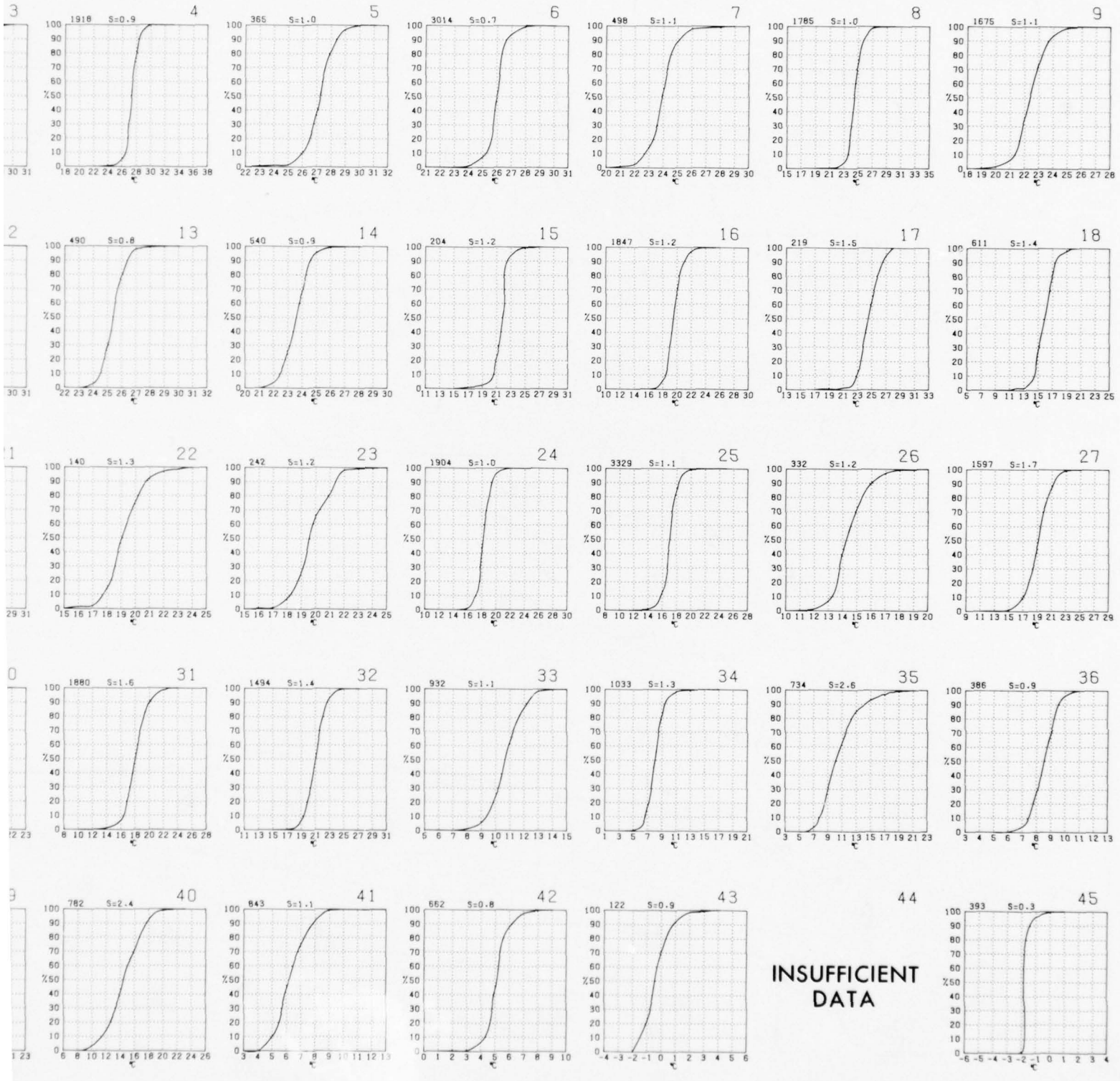




Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

TURE

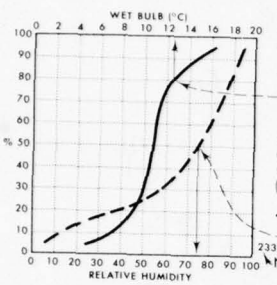
NOVEMBER



INSUFFICIENT DATA

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(80% of *all observed wet-bulb temperatures were* ≤12.5°C or 54.5°F.)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

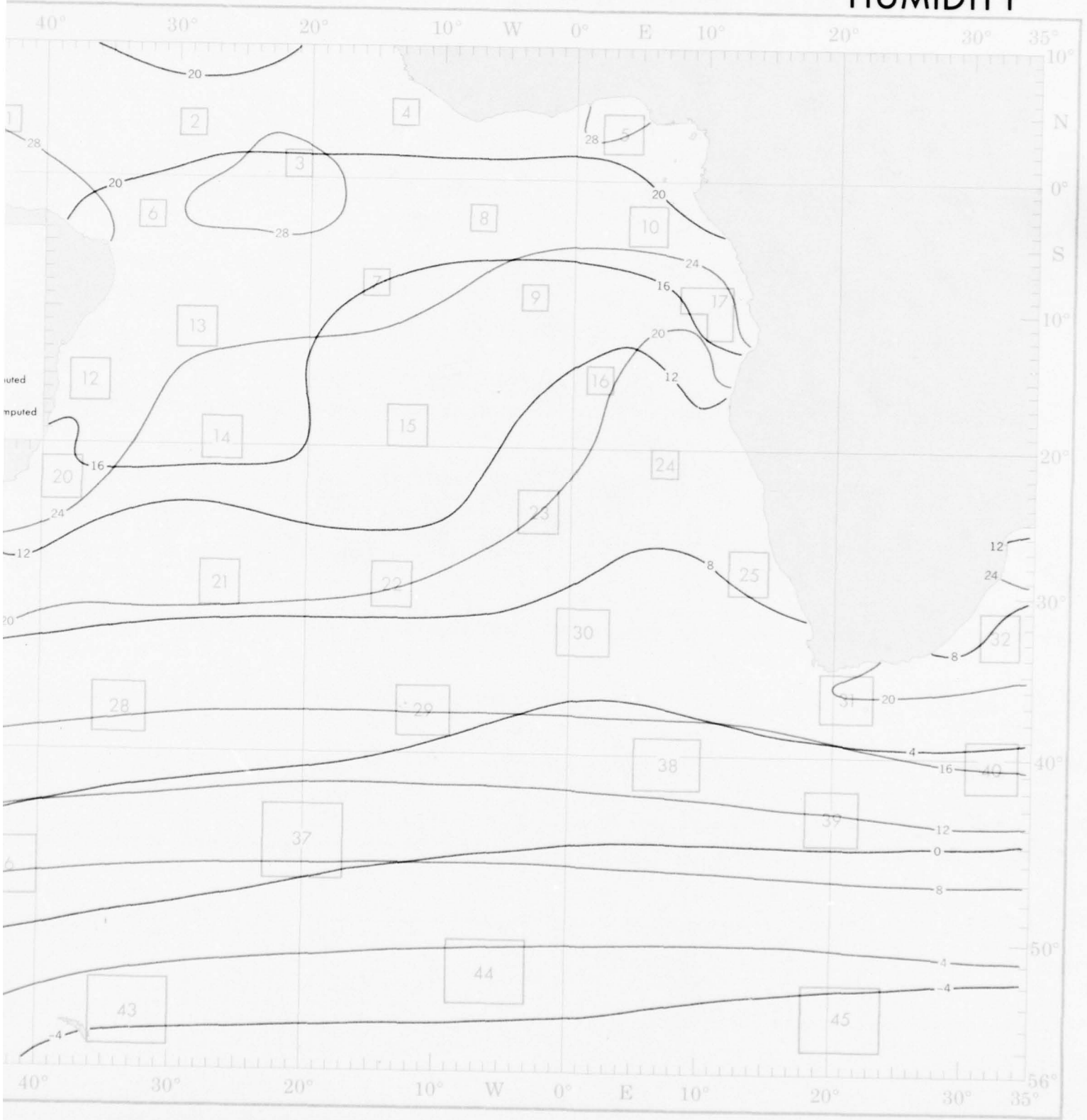
(50% of *all observed relative humidities were* ≤74%.)

Number of observations.

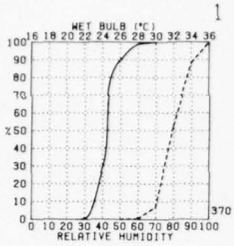
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

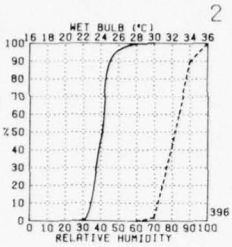
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

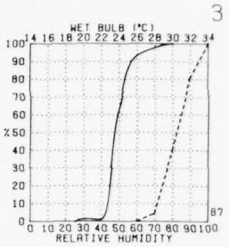
HUMIDITY

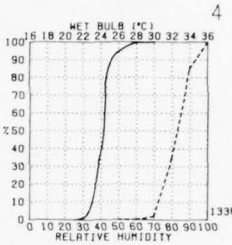

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
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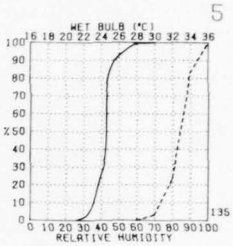
WET BULB AND RELATIVE HUMIDITY

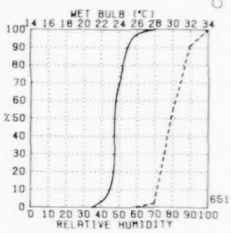
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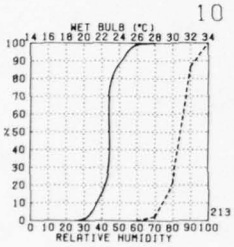
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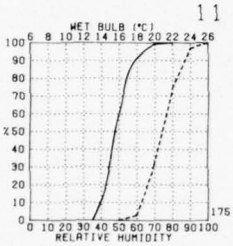
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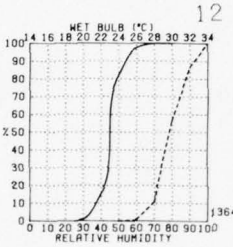
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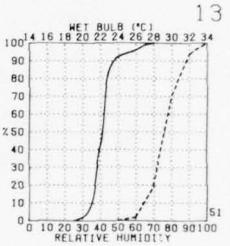
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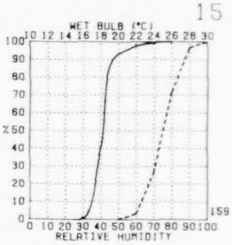
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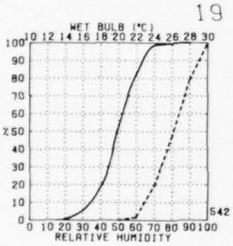
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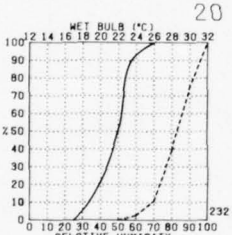
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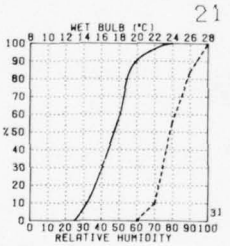
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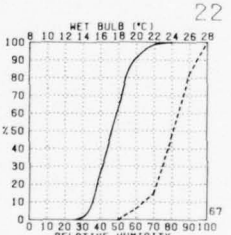
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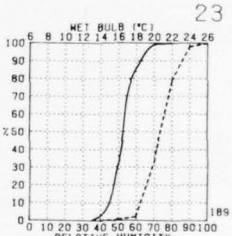
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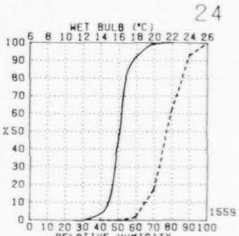
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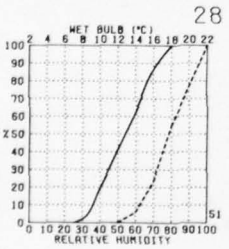
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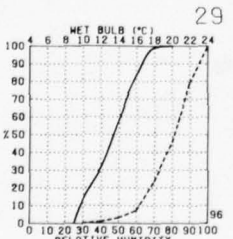
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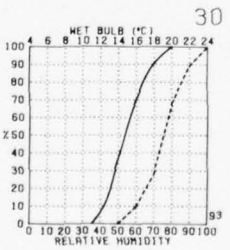
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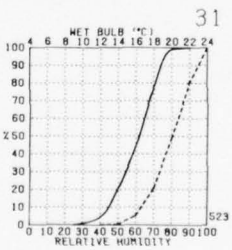
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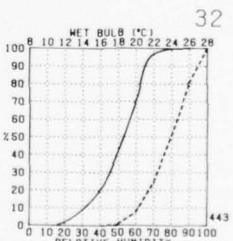
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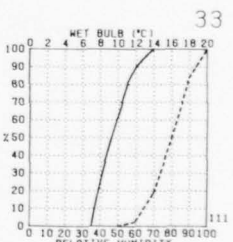
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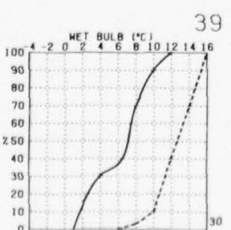
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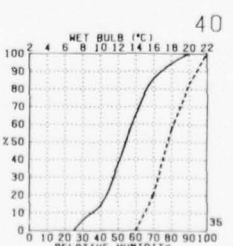
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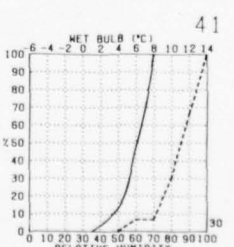
INSUFFICIENT DATA

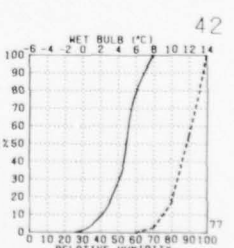
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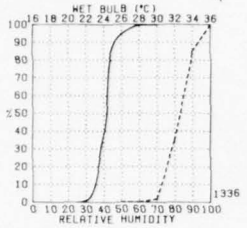
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Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

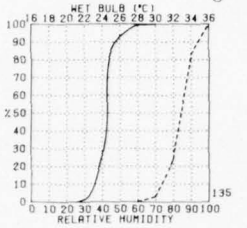
E HUMIDITY

NOVEMBER

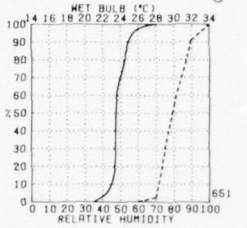
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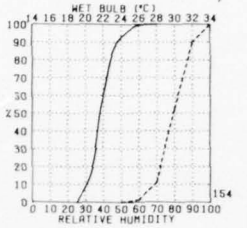
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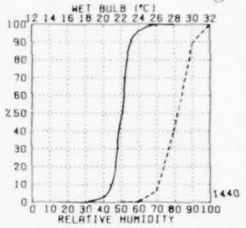
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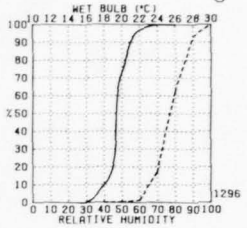
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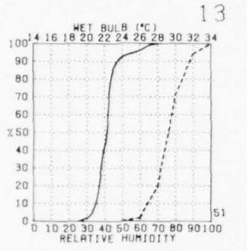
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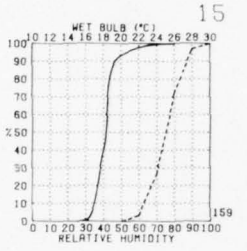
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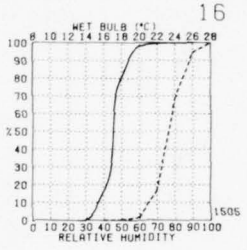
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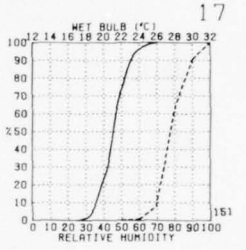
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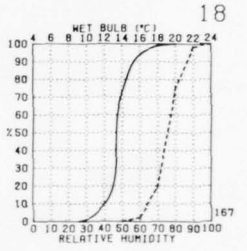
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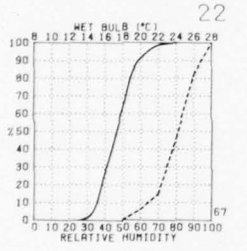
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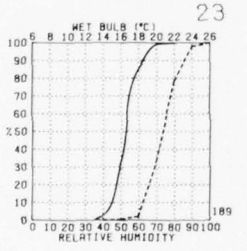
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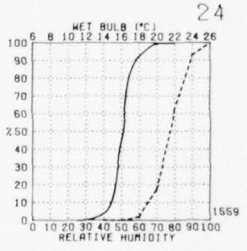
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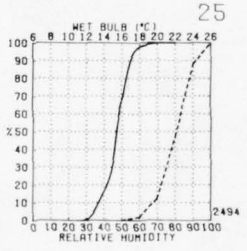
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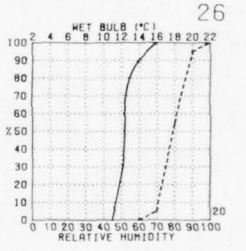
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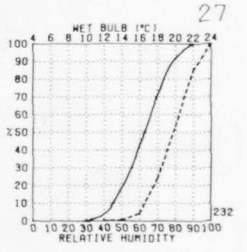
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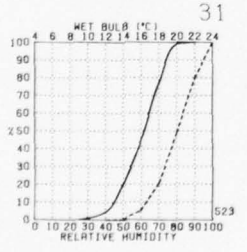
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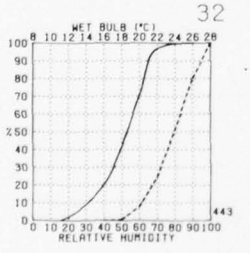
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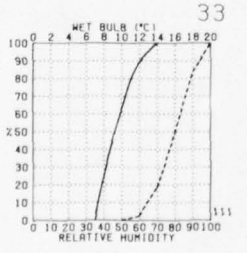
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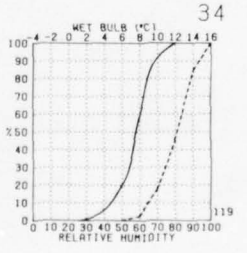
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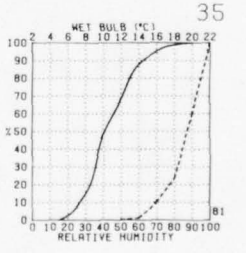
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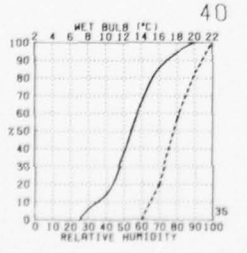
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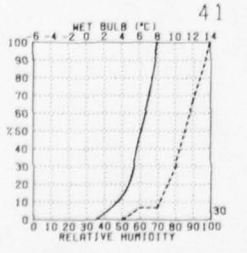
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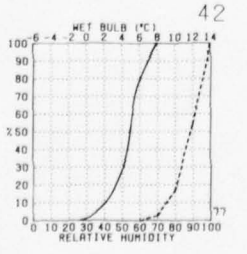
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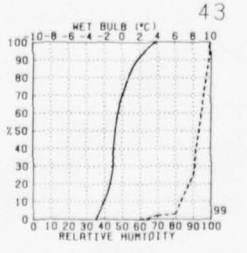
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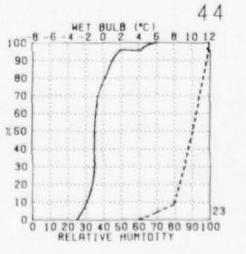
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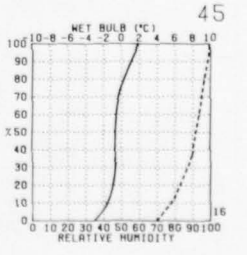
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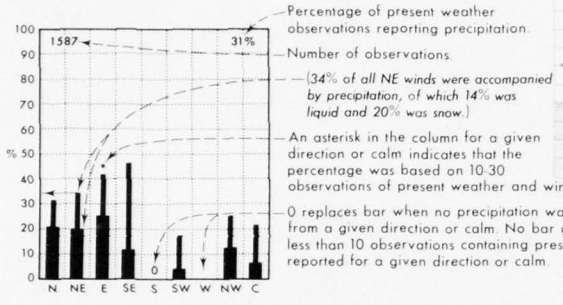


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the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

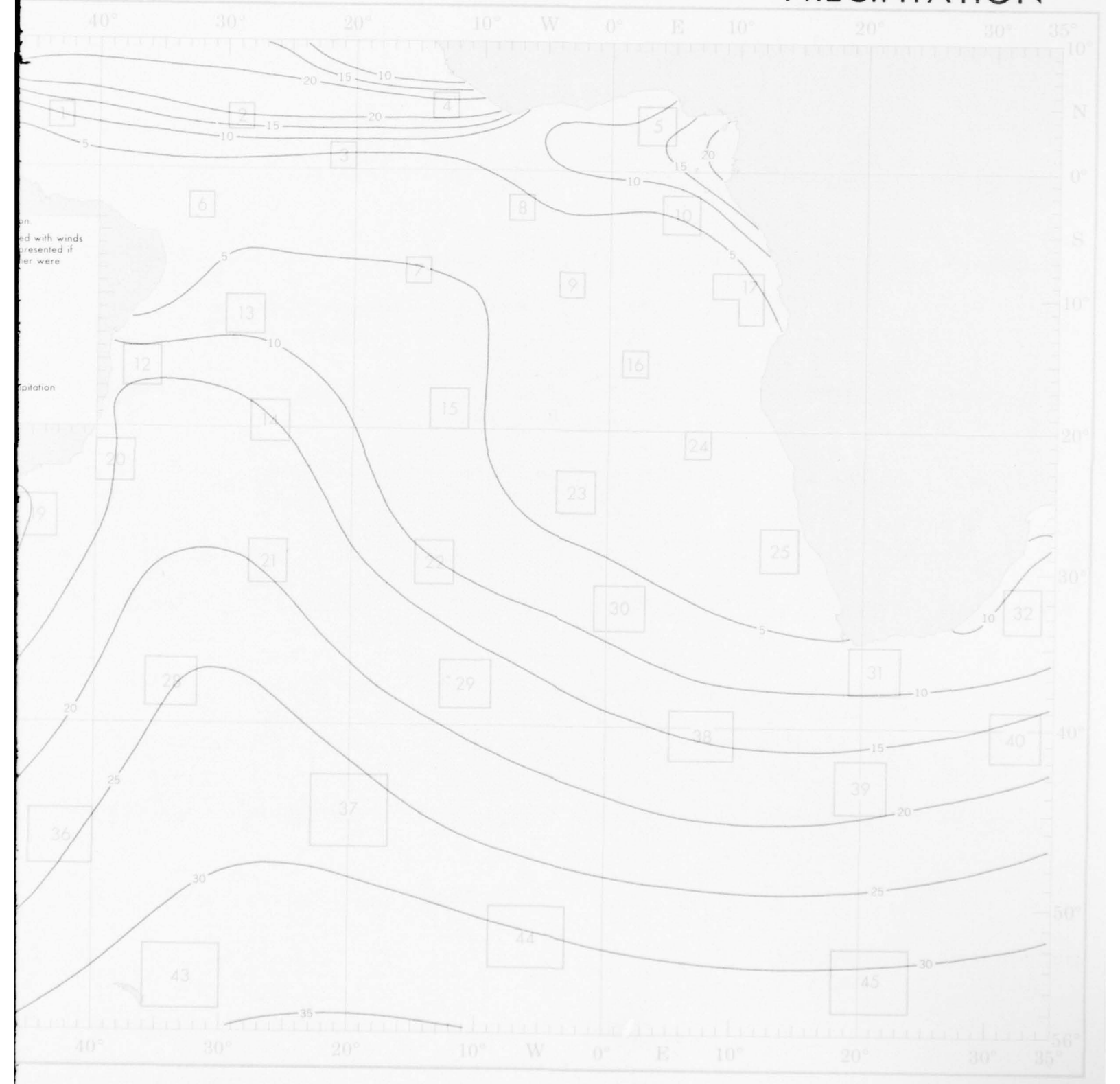
(34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

RED LINE – Percent frequency of observations reporting precipitation.

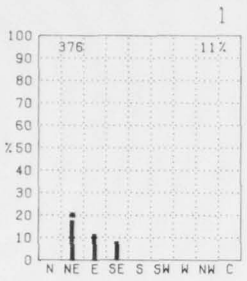
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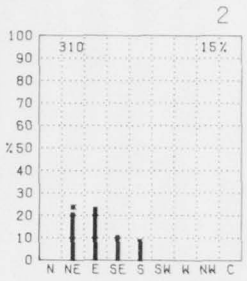


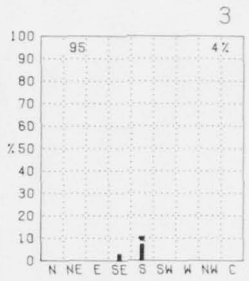
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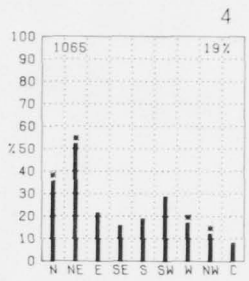
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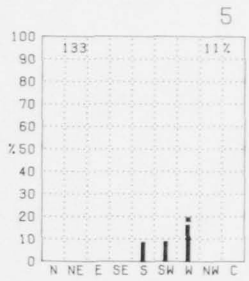
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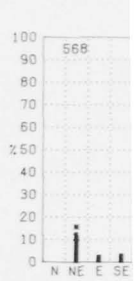


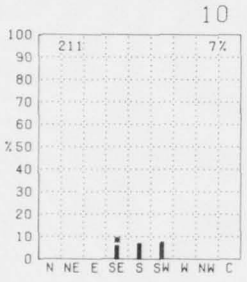


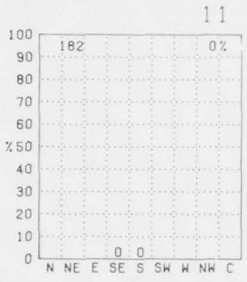


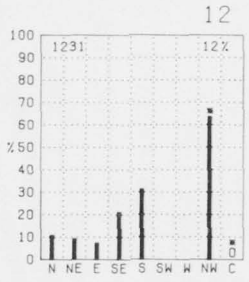


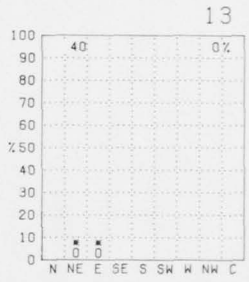






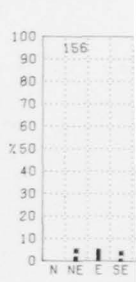


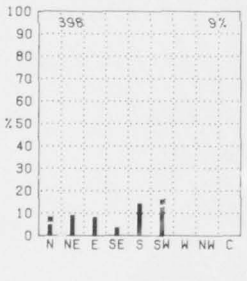


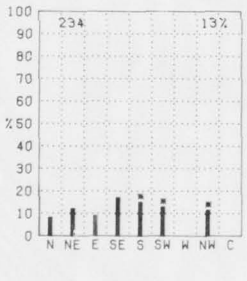


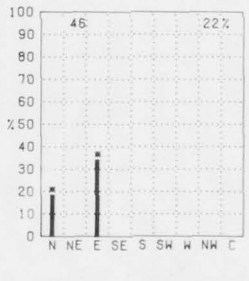
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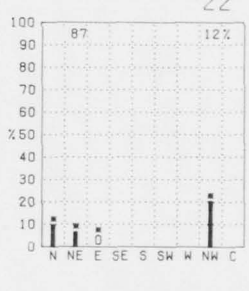
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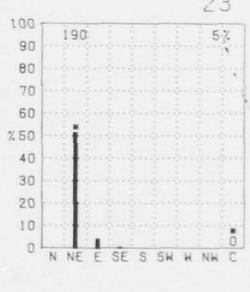


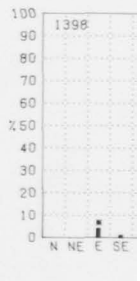


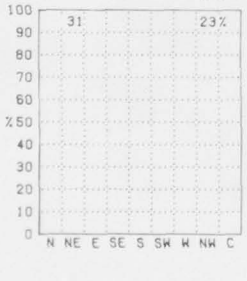


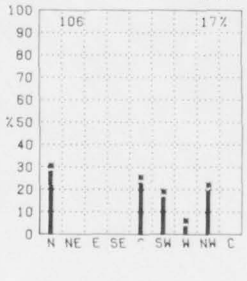


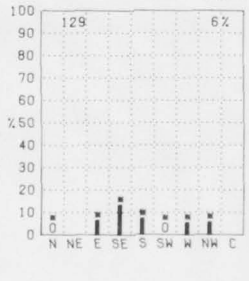


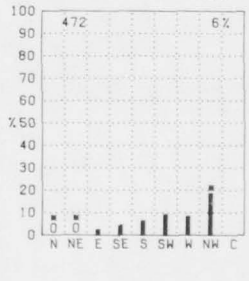


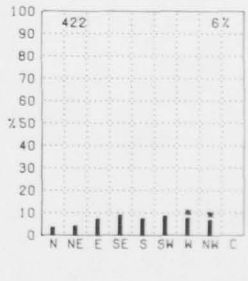


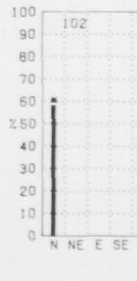












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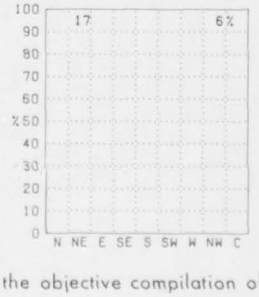
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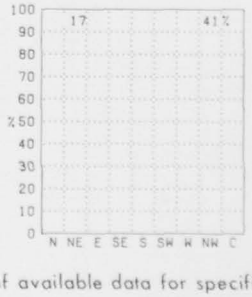
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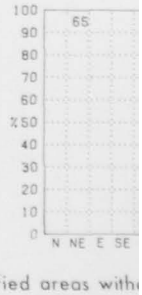
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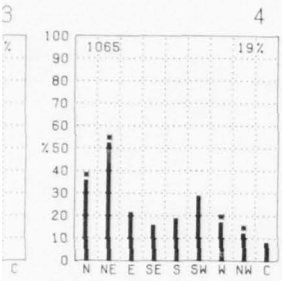


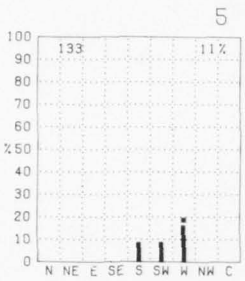


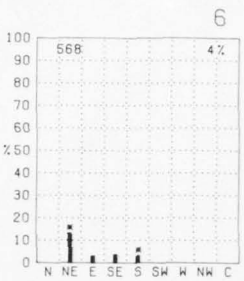


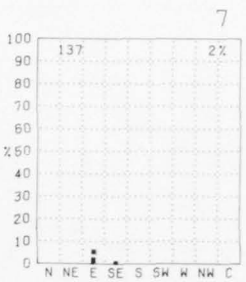
Graphs represent the objective compilation of available data for specified areas with
The isopleth analyses (opposite page) are based on all available data subjectively ac

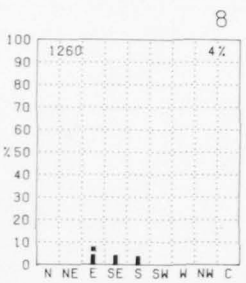
NOVEMBER

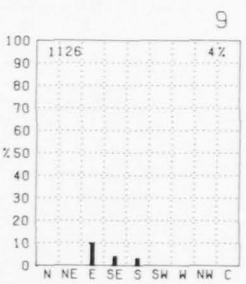


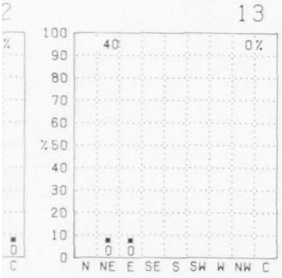






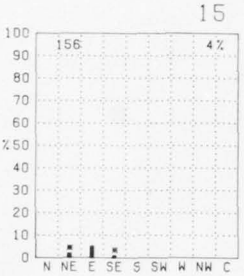


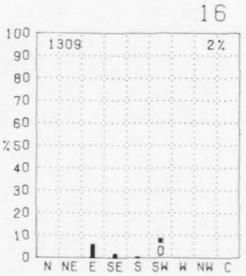


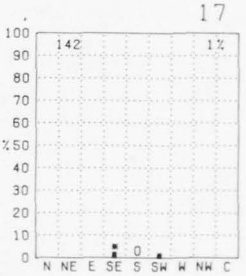


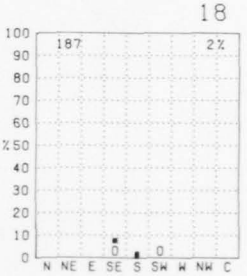
14

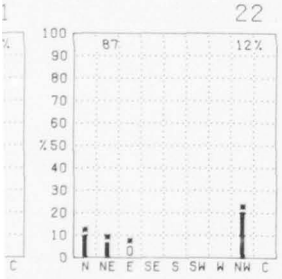
INSUFFICIENT DATA

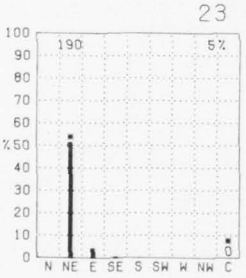


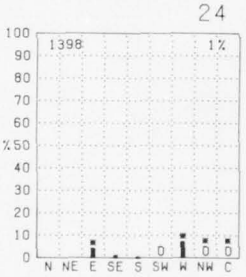


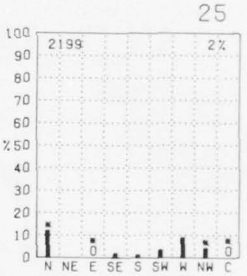


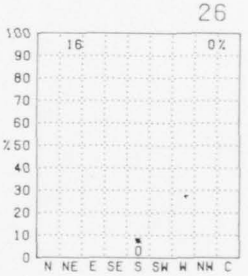


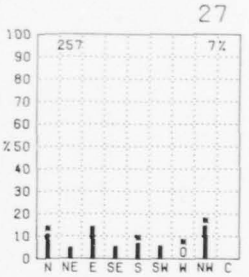


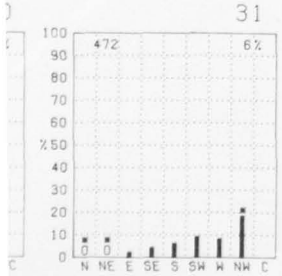


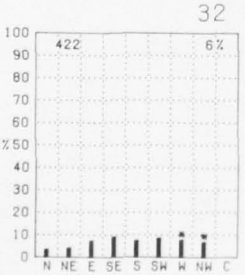


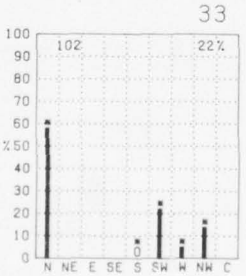


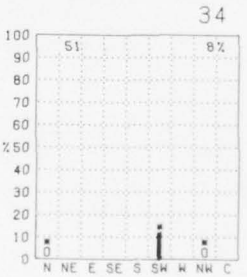


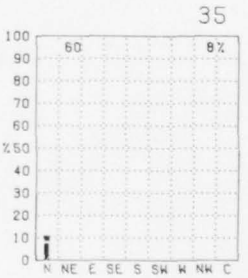






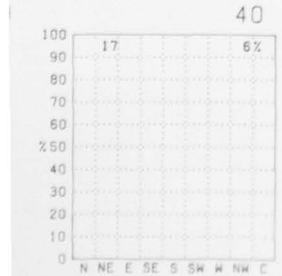


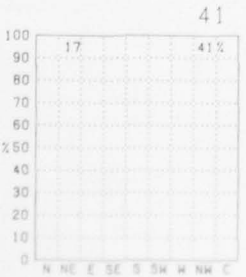


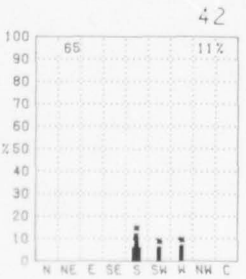


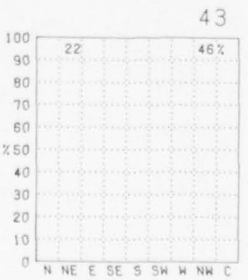
36

INSUFFICIENT DATA



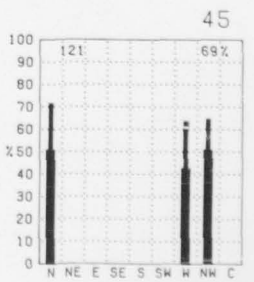






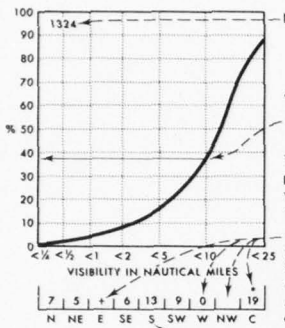
44

INSUFFICIENT DATA



t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of all visibilities reported were <10 nautical miles.)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of all S winds were accompanied by visibilities <2 nautical miles.)

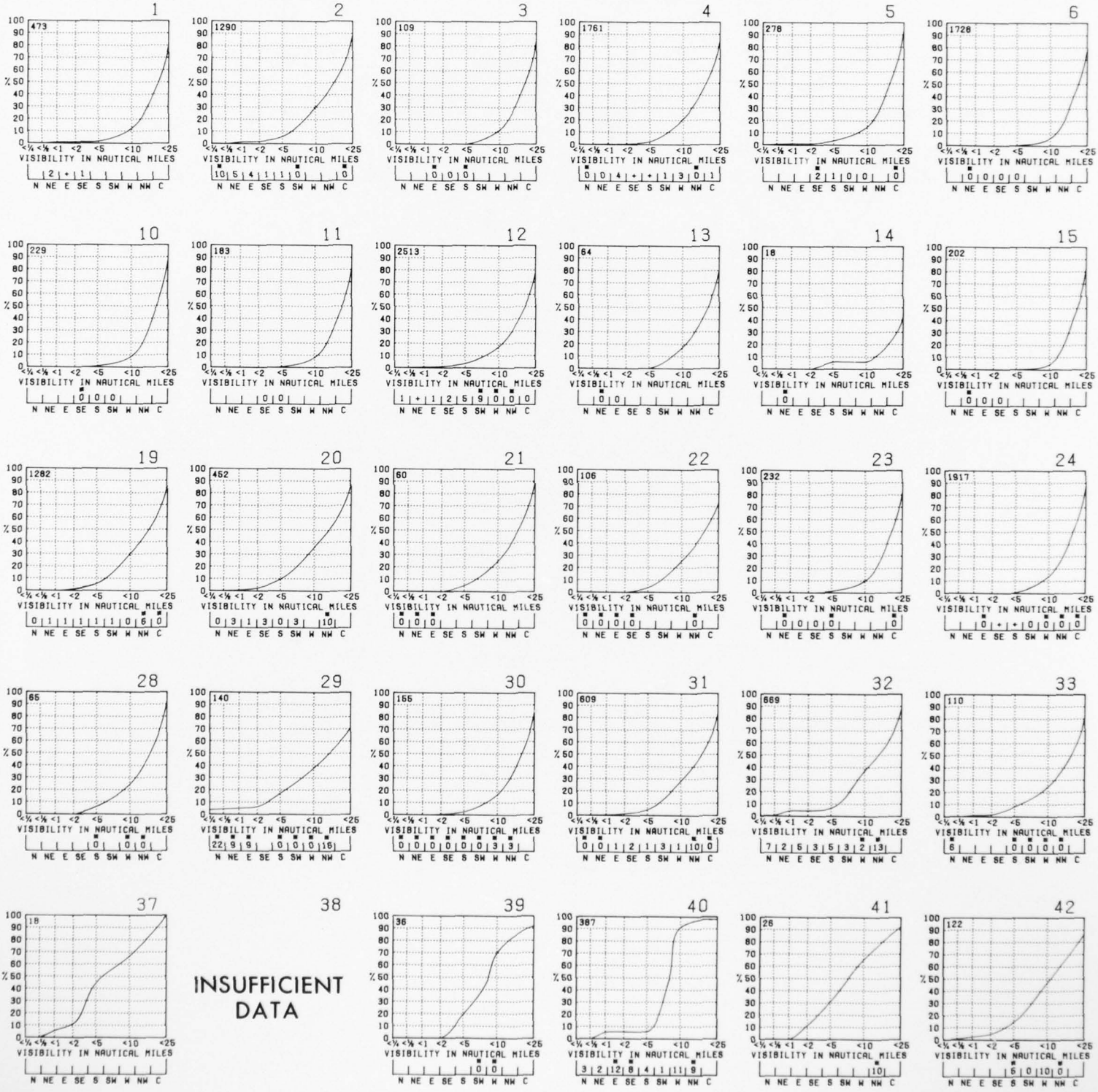
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

RED LINE - Percent frequency of visibilities <2 nautical miles

VISIBILITY

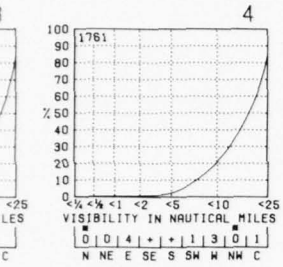

40°
30°
20°
10°
W
0°
E
10°
20°
30°
35°
10°
N
0°
S
10°
20°
30°
40°
50°
56°
95
5
10
90
80
70
60
40
30
20
1
2
3
4
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6
7
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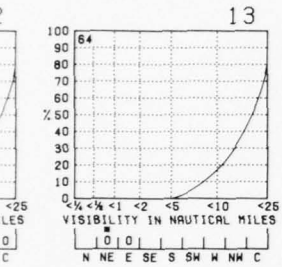
VISIBILITY

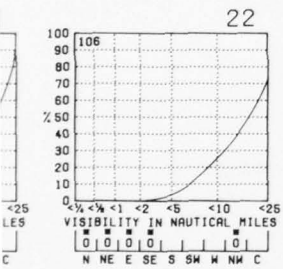


Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

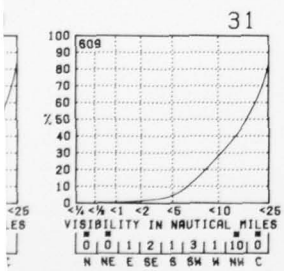
NOVEMBER





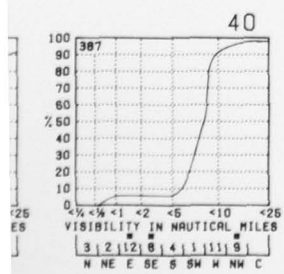


INSUFFICIENT DATA



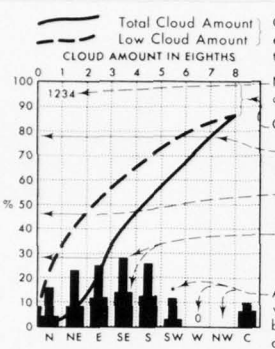
36

INSUFFICIENT DATA



nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(77% of all total cloud amounts were ≤7/8.)

(46% of all low cloud amounts were ≤2/8.)

(28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.



Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

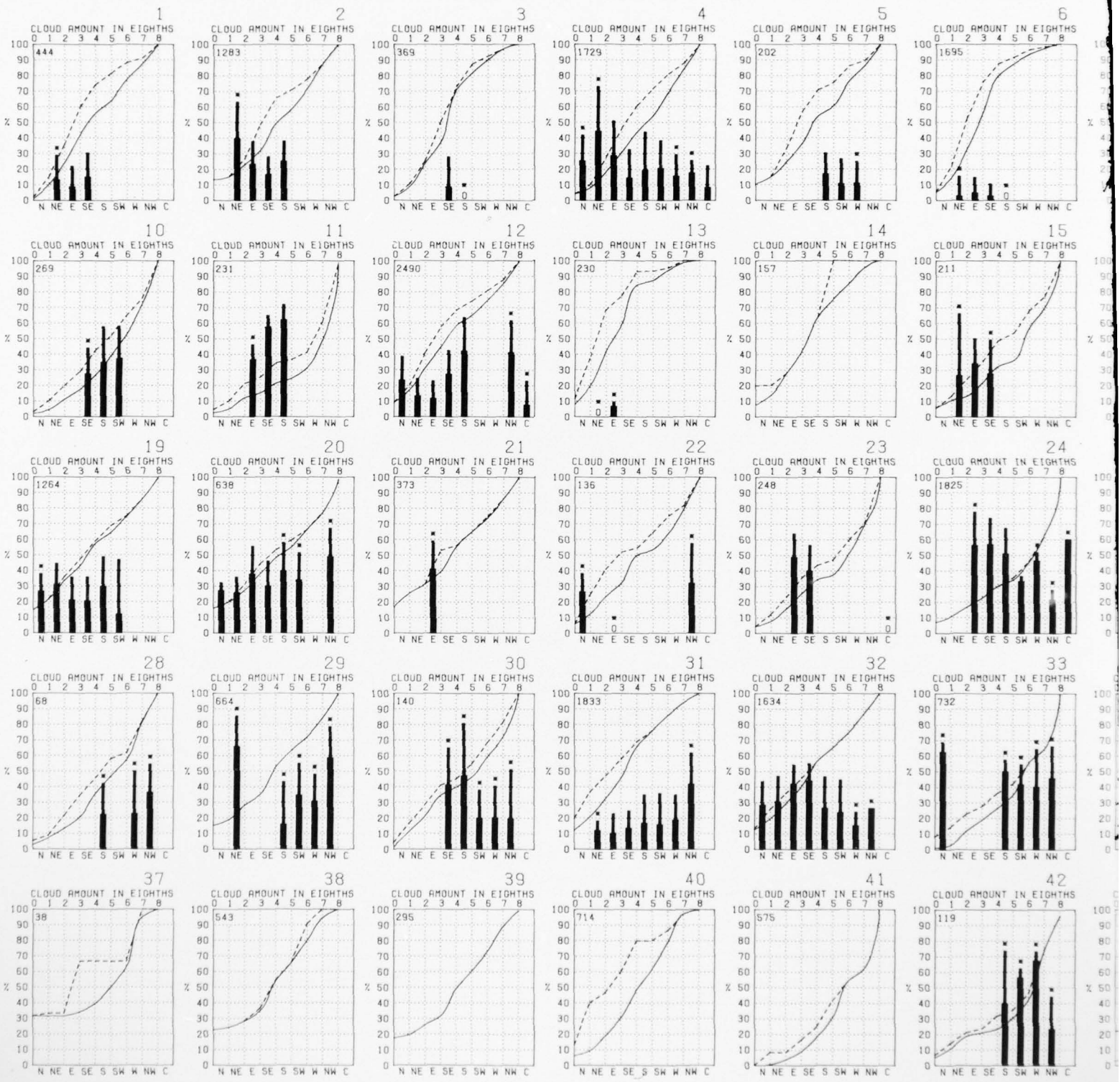
BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

CLOUD COVER

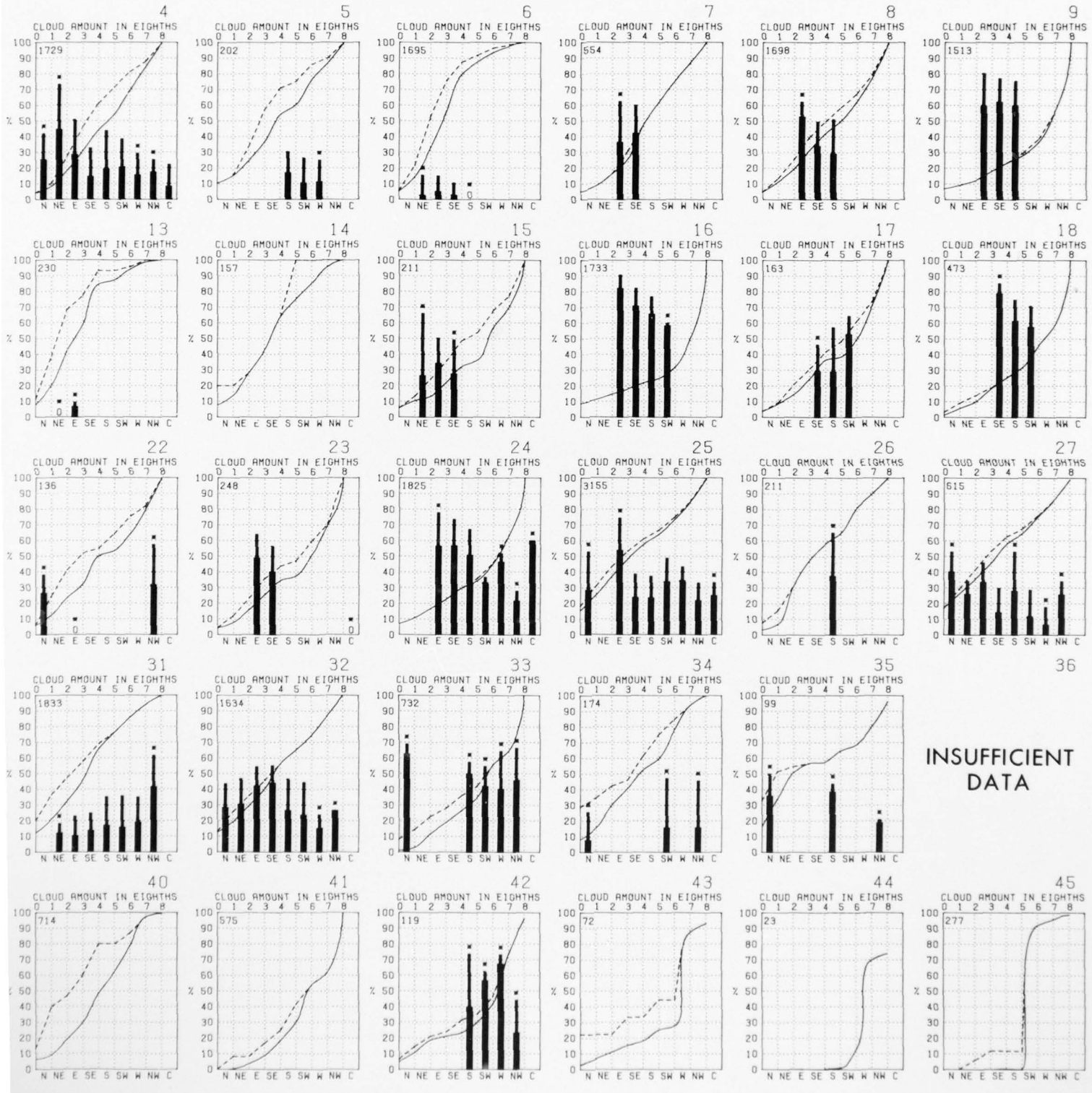

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 36 38 39 40 43 44 45
10 20 30 40 50 60 70 80

CLOUD COVER



Graphs represent the objective compilation of available data for specified areas without regard to susp
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias

NOVEMBER



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INSUFFICIENT DATA

e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER



LOW CLOUD CEILING	<½	½<1	1<2	2<3	3<5	5<10	≥10
N C	0	0	+	3	13	64	
30<80	0	0	0	0	+	1	
25<30	0	+	0	0	0	4	
20<25	0	+	1	1	2	2	
10<20	0	+	1	1	2	1	
6<10	0	1	0	+	+	0	
3<6	+	+	0	+	+	0	
1.5<3	+	0	0	0	0	0	
0<1.5	+	0	0	0	0	0	

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CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	73
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	2
20<35	0	0	0	0	+	2
10<20	0	+	0	0	1	10
6<10	0	+	0	+	2	5
3<6	0	0	+	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	1

369

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	65
50<80	0	0	0	+	+	1
35<50	0	0	0	+	+	1
20<35	0	0	0	+	1	7
10<20	0	0	0	1	1	10
6<10	0	0	0	1	2	5
3<6	0	0	0	0	1	2
1.5<3	0	0	0	+	0	0
0<1.5	0	0	0	0	0	0

348

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	72
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	7
10<20	0	0	0	0	2	8
6<10	0	0	0	0	1	7
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

92

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	59
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	3
20<35	0	0	0	+	2	7
10<20	0	0	+	+	2	12
6<10	+	+	0	1	1	6
3<6	0	+	0	+	1	1
1.5<3	0	0	0	+	0	+
0<1.5	0	0	+	0	+	+

1182

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	70
50<80	0	0	0	0	0	0
35<50	0	0	0	1	0	4
20<35	0	0	0	1	2	9
10<20	0	0	0	0	1	5
6<10	0	0	0	0	2	2
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	0	0

133

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	86
50<80	0	0	0	0	+	+
35<50	0	0	0	0	+	1
20<35	0	0	0	0	+	4
10<20	0	0	0	0	+	5
6<10	0	0	0	0	+	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

613

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	+	42
50<80	0	0	0	0	0	2
35<50	0	0	0	0	+	5
20<35	0	0	0	0	1	13
10<20	0	0	0	+	3	20
6<10	0	0	0	0	1	9
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

210

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	31
50<80	0	0	0	0	1	2
35<50	0	0	0	0	1	8
20<35	0	0	0	0	1	19
10<20	0	0	0	0	1	21
6<10	0	0	0	0	1	11
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

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12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	+	0	+	3	66
50<80	0	0	+	+	+	1
35<50	0	0	+	+	+	2
20<35	0	0	0	+	1	5
10<20	0	+	0	+	2	8
6<10	0	+	0	+	2	4
3<6	0	0	0	+	1	1
1.5<3	0	+	0	0	+	+
0<1.5	0	+	+	+	0	+

1331

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	93
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	7
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

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INSUFFICIENT DATA

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LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	46
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	14
10<20	0	0	0	0	1	18
6<10	0	0	0	0	0	13
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	1

152

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	1	1	7	51
50<80	0	0	0	0	+	1
35<50	0	0	0	+	2	4
20<35	0	0	0	1	2	7
10<20	0	0	+	+	4	9
6<10	0	0	0	+	2	3
3<6	0	0	+	+	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	+	0	+

475

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	5	48
50<80	0	0	0	0	+	1
35<50	0	+	1	+	1	2
20<35	+	0	+	3	3	5
10<20	0	0	0	2	6	9
6<10	0	0	1	0	1	3
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	+	1	+

232

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	50
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	6
10<20	0	0	0	0	6	9
6<10	0	0	0	3	3	9
3<6	0	0	0	3	3	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

32

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	3
20<35	0	0	0	0	4	3
10<20	0	0	0	1	4	16
6<10	0	0	0	0	3	6
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

67

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	43
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	8
10<20	0	0	0	1	3	28
6<10	0	0	0	0	2	9
3<6	0	0	0	0	1	2
1.5<3	0	0	0	1	0	0
0<1.5	0	0	0	0	0	0

183

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	29
50<80	0	0	0	0	+	2
35<50	0	0	0	+	+	5
20<35	0	0	0	0	2	15
10<20	0	0	0	+	2	28
6<10	0	0	0	+	2	7
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	+

1427

28

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	2	4	37
50<80	0	0	0	0	4	4
35<50	0	0	0	2	6	6
20<35	0	0	0	2	0	16
10<20	0	0	0	2	2	4
6<10	0	0	0	0	4	2
3<6	0	0	0	0	0	4
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

51

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	38
50<80	0	0	0	0	2	1
35<50	1	0	0	0	2	2
20<35	0	0	0	0	3	5
10<20	0	0	1	2	3	19
6<10	0	0	0	3	4	8
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	0	0	0

93

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	46
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	5
20<35	0	0	0	0	2	6
10<20	0	0	0	0	2	23
6<10	0	0	0	0	1	7
3<6	0	0	0	1	0	1
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	0	1

83

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	7	63
50<80	0	0	0	0	1	1
35<50	0	0	0	0	1	1
20<35	0	0	0	+	1	4
10<20	0	0	0	0	3	10
6<10	0	0	+	1	1	3
3<6	0	0	0	1	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

358

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	51
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	2
20<35	0	0	0	+	2	7
10<20	0	0	0	0	4	13
6<10	+	0	0	1	3	8
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	+

402

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	31
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	4	2	13
10<20	0	0	0	1	4	20
6<10	0	0	1	1	7	8
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	1	0	0	0	0

84

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	87
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	7
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	7	0

15

41

INSUFFICIENT DATA

42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	29
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	0
20<35	0	0	0	1	6	17
10<20	0	0	0	1	3	17
6<10	0	0	0	1	1	4
3<6	0	0	0	0	3	0
1.5<3	0	0	1	0	1	1
0<1.5	1	0	0	1	0	1

72

Graphs represent the objective compilation of available data for specified areas without regard to s
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where b

NOVEMBER

4

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	2	59
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	3
20<35	0	0	0	+	2	7
10<20	0	0	+	+	2	12
6<10	+	+	0	1	1	6
3<6	0	+	0	+	1	1
1.5<3	0	0	0	+	0	+
0<1.5	0	0	+	0	+	+

1182

5

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	70
50<80	0	0	0	0	0	0
35<50	0	0	0	1	0	4
20<35	0	0	0	1	2	9
10<20	0	0	0	0	1	5
6<10	0	0	0	0	2	2
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	1	0	0	0	0	0

133

6

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	86
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	+	4
10<20	0	0	0	+	0	5
6<10	0	0	0	0	+	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

613

7

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	41
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	3
20<35	0	0	0	0	1	11
10<20	0	0	0	0	1	30
6<10	0	0	0	0	1	11
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

132

8

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	50
50<80	0	0	0	0	+	2
35<50	0	0	0	+	+	4
20<35	0	0	0	0	1	12
10<20	0	0	0	+	1	21
6<10	0	0	0	0	1	6
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	0

1322

9

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	+	24
50<80	0	0	0	0	+	2
35<50	0	0	0	0	0	8
20<35	0	0	0	0	+	18
10<20	0	0	0	+	2	33
6<10	0	0	0	0	1	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	0	+
0<1.5	0	0	0	0	0	+

1189

13

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	93
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	7
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

41

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	46
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	0
20<35	0	0	0	0	1	14
10<20	0	0	0	0	1	18
6<10	0	0	0	0	0	13
3<6	0	0	0	0	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	1	1

152

16

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	19
50<80	0	0	0	0	+	2
35<50	0	0	0	0	+	9
20<35	0	0	0	0	2	21
10<20	0	0	0	0	1	34
6<10	0	0	0	0	1	9
3<6	0	0	0	0	+	1
1.5<3	0	0	0	0	+	0
0<1.5	0	0	0	0	+	+

1367

17

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	41
50<80	0	0	0	0	0	1
35<50	0	0	0	0	2	2
20<35	0	0	0	0	2	15
10<20	0	0	0	0	3	19
6<10	0	0	0	0	0	8
3<6	0	0	0	0	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

134

18

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	23
50<80	0	0	0	0	0	1
35<50	0	0	0	0	1	7
20<35	0	0	0	0	4	20
10<20	0	0	0	1	1	27
6<10	0	0	0	0	4	8
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

168

22

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	54
50<80	0	0	0	0	0	0
35<50	0	0	0	0	1	3
20<35	0	0	0	0	4	3
10<20	0	0	0	1	4	16
6<10	0	0	0	0	3	6
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

57

23

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	1	43
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	1
20<35	0	0	0	0	1	8
10<20	0	0	0	1	3	28
6<10	0	0	0	0	2	9
3<6	0	0	0	0	1	2
1.5<3	0	0	0	1	0	0
0<1.5	0	0	0	0	0	0

183

24

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	1	29
50<80	0	0	0	0	+	2
35<50	0	0	0	+	+	6
20<35	0	0	0	0	2	19
10<20	0	0	0	+	2	28
6<10	0	0	0	+	2	7
3<6	0	0	0	0	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	+

1427

25

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	7	55
50<80	0	0	0	+	+	1
35<50	0	0	0	0	+	3
20<35	0	0	0	+	1	8
10<20	0	0	0	+	3	14
6<10	0	0	0	+	1	4
3<6	0	0	0	+	+	+
1.5<3	0	0	0	0	+	+
0<1.5	+	0	0	0	0	0

2277

26

INSUFFICIENT DATA

27

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	8	52
50<80	0	0	+	+	+	+
35<50	0	0	+	1	2	2
20<35	0	0	0	1	1	8
10<20	0	+	1	2	2	6
6<10	0	0	0	0	2	3
3<6	0	0	+	0	+	0
1.5<3	0	0	0	0	0	0
0<1.5	0	+	0	1	+	0

259

31

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	+	+	7	63
50<80	0	0	0	0	1	1
35<50	0	0	0	0	1	1
20<35	0	0	0	+	1	4
10<20	0	0	0	0	3	10
6<10	0	0	+	1	1	3
3<6	0	0	0	1	+	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

358

32

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	51
50<80	0	0	0	0	+	1
35<50	0	0	0	0	0	2
20<35	0	0	0	+	2	7
10<20	0	0	0	0	4	13
6<10	+	0	0	1	3	8
3<6	0	0	0	+	1	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	+	0	+

402

33

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	5	31
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	4	2	13
10<20	0	0	0	1	4	20
6<10	0	0	1	1	7	8
3<6	0	0	0	1	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	1	0	0	0	0

84

34

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	6	62
50<80	0	0	0	0	0	4
35<50	0	0	0	0	0	4
20<35	0	0	0	0	2	12
10<20	0	0	0	0	0	8
6<10	0	0	0	4	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

52

35

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	2	0	0	0	8	49
50<80	0	0	0	0	2	0
35<50	0	0	0	0	3	5
20<35	0	0	0	0	2	7
10<20	0	0	0	3	3	5
6<10	0	0	0	0	2	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	5	0	0	0	0	2

61

36

INSUFFICIENT DATA

40

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	87
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	7
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	7	0

15

41

INSUFFICIENT DATA

42

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	29
50<80	0	0	0	0	0	1
35<50	0	0	0	1	1	0
20<35	0	0	0	1	6	17
10<20	0	0	0	1	3	17
6<10	0	0	0	1	1	4
3<6	0	0	0	0	3	0
1.5<3	0	0	1	0	1	1
0<1.5	1	0	0	1	0	1

72

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

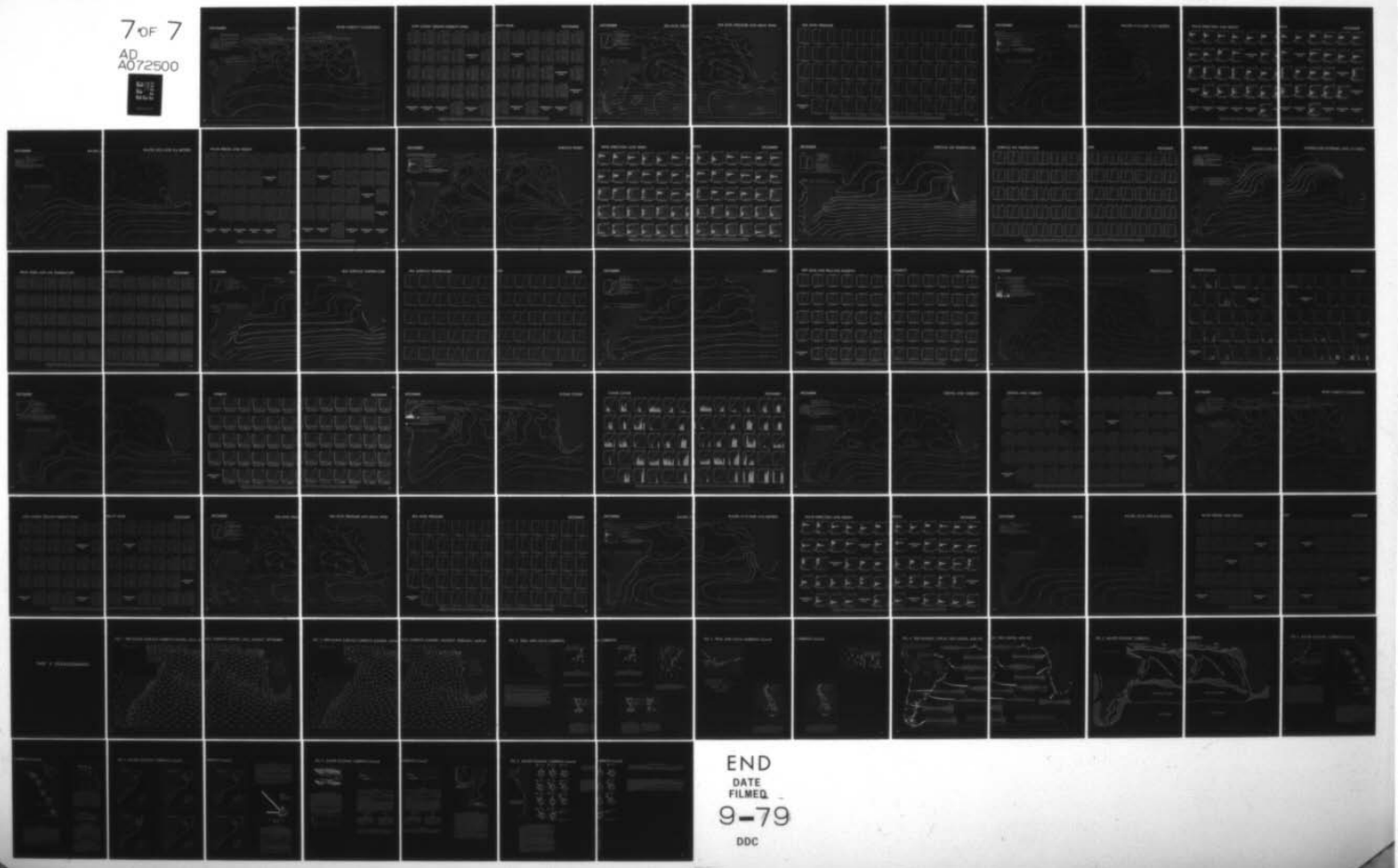
45

LOW CLOUD CEILING \ VISIBILITY	<1/2	1/2-<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	0
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	0
10<20	0	0	0	0	0	0
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

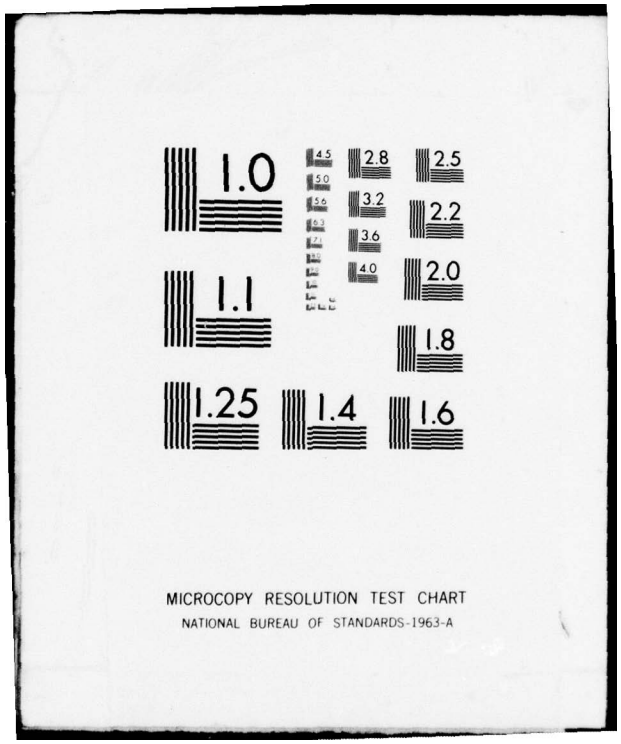
e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

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U. S. NAVY MARINE CLIMATIC ATLAS OF THE WORLD. VOLUME IV. SOUTH--ETC(U)
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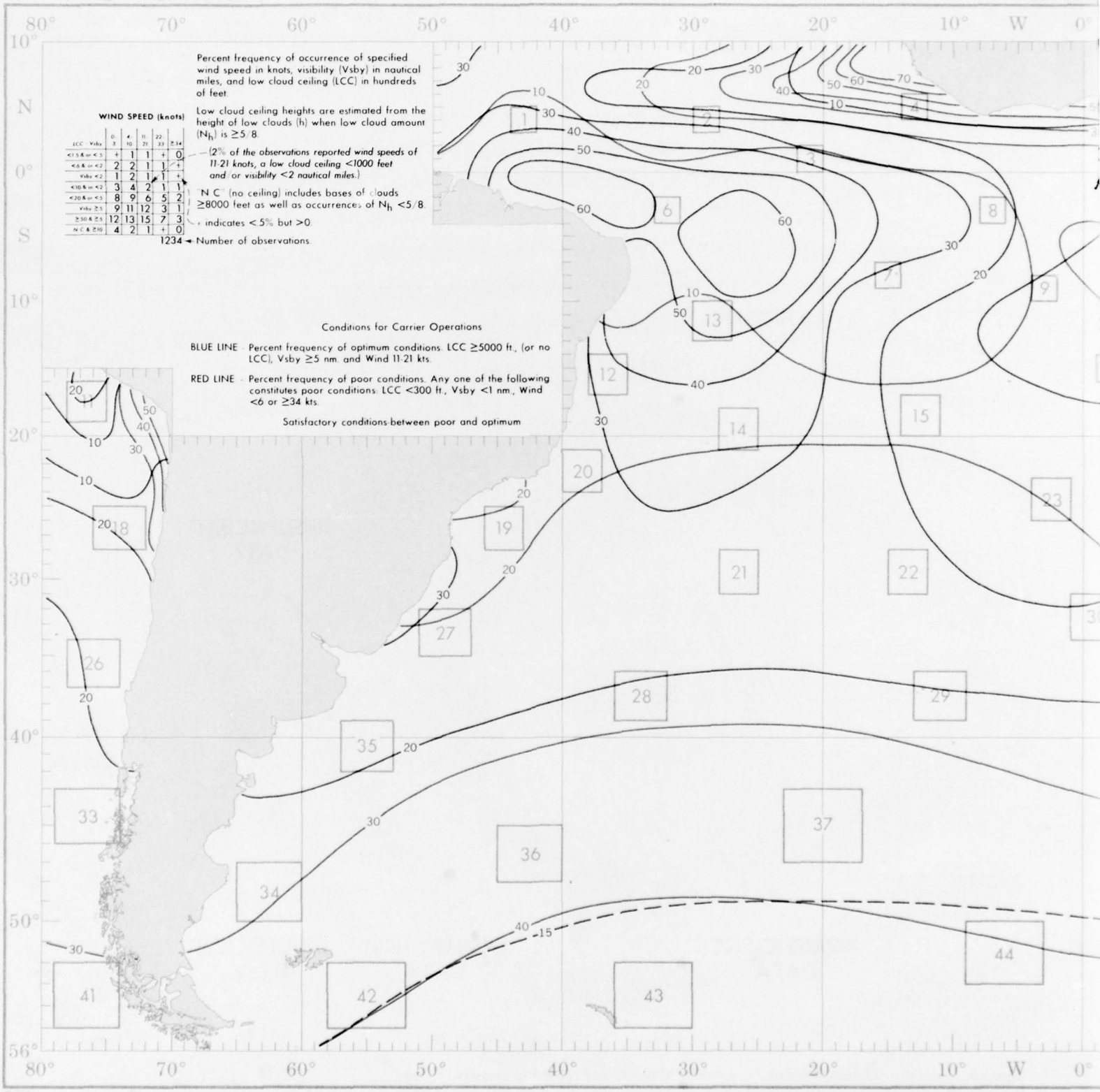
7 OF 7
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END
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1.0
1.1
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4.0
4.5
5.0
5.6
6.3
7.1
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

NOVEMBER


Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.
Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.
WIND SPEED (knots)
LCC Vsby | 0 3 | 4 10 | 11 21 | 22 33 | ≥34
<1.5 & or <5 | + | 1 | 1 | + | 0
<6 & or <2 | 2 | 2 | 1 | 1 | +
Vsby <2 | 1 | 2 | 1 | 1 | +
<10 & or <2 | 3 | 4 | 2 | 1 | 1
<20 & or <5 | 8 | 9 | 6 | 5 | 2
Vsby ≥5 | 9 | 11 | 12 | 3 | 1
≥50 & ≥5 | 12 | 13 | 15 | 7 | 3
N.C. & ≥10 | 4 | 2 | 1 | + | 0
1234
(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)
"N.C." (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.
+ indicates <.5% but >0.
Number of observations.
Conditions for Carrier Operations
BLUE LINE - Percent frequency of optimum conditions. LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.
RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.
Satisfactory conditions between poor and optimum
80° 70° 60° 50° 40° 30° 20° 10° W 0°
10° N 0° S 10° 20° 30° 40° 50° 56°

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	0	4	5	+	0
<20 & OR <5	1	8	10	1	0
VSBY ≥5	3	50	44	2	0
≥50 & ≥5	2	39	33	1	0
NC & ≥10	2	38	33	+	0

366

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	1	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	6	3	0	0
<20 & OR <5	2	11	11	0	0
VSBY ≥5	6	53	38	+	0
≥50 & ≥5	3	38	26	+	0
NC & ≥10	3	36	26	0	0

341

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	7	0	0
<20 & OR <5	0	8	11	0	0
VSBY ≥5	4	34	62	0	0
≥50 & ≥5	4	26	42	0	0
NC & ≥10	4	26	41	0	0

92

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	2	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	1	6	3	+	0
<20 & OR <5	3	16	6	+	0
VSBY ≥5	18	65	14	+	0
≥50 & ≥5	14	41	7	0	0
NC & ≥10	13	39	6	0	0

1158

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	5	0	0	0
<20 & OR <5	4	10	0	0	0
VSBY ≥5	16	75	7	0	0
≥50 & ≥5	11	56	5	0	0
NC & ≥10	11	54	5	0	0

133

WIND SPEED (KNO

LCC - VSBY	0-3	4-10	11-21	22-33
<1.5 & OR <.5	0	0	0	0
<6 & OR <2	0	0	0	0
VSBY <2	0	0	0	0
<10 & OR <2	0	1	1	0
<20 & OR <5	0	2	5	0
VSBY ≥5	+	39	59	2
≥50 & ≥5	+	36	50	2
NC & ≥10	+	36	48	2

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	9	3	0	0
<20 & OR <5	0	21	14	0	0
VSBY ≥5	1	67	31	0	0
≥50 & ≥5	+	32	12	0	0
NC & ≥10	+	30	11	0	0

210

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	10	2	0	0
<20 & OR <5	1	20	14	0	0
VSBY ≥5	3	46	47	3	0
≥50 & ≥5	1	15	21	0	0
NC & ≥10	1	14	16	0	0

154

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	+	0
<6 & OR <2	0	2	1	+	0
VSBY <2	0	+	+	+	0
<10 & OR <2	+	4	5	1	0
<20 & OR <5	1	9	10	1	0
VSBY ≥5	3	52	40	2	0
≥50 & ≥5	2	41	27	1	0
NC & ≥10	2	39	25	1	0

1322

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	5	2	0	0
VSBY ≥5	5	56	39	0	0
≥50 & ≥5	5	51	37	0	0
NC & ≥10	5	51	37	0	0

41

14

INSUFFICIENT DATA

WIND SPEED (KNO

LCC - VSBY	0-3	4-10	11-21	22-33
<1.5 & OR <.5	0	0	1	0
<6 & OR <2	0	1	3	0
VSBY <2	0	0	0	0
<10 & OR <2	1	7	9	0
<20 & OR <5	2	13	18	2
VSBY ≥5	3	40	51	5
≥50 & ≥5	1	22	24	2
NC & ≥10	1	21	22	1

19

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	1	1	+	+
VSBY <2	0	0	+	+	0
<10 & OR <2	+	3	3	1	1
<20 & OR <5	+	8	11	3	1
VSBY ≥5	3	43	43	7	+
≥50 & ≥5	2	30	27	2	0
NC & ≥10	2	27	22	2	0

460

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	2	0	0
<6 & OR <2	+	2	3	2	0
VSBY <2	0	+	1	1	0
<10 & OR <2	+	4	5	2	0
<20 & OR <5	2	8	18	4	0
VSBY ≥5	4	34	45	7	0
≥50 & ≥5	2	24	26	4	0
NC & ≥10	2	21	22	4	0

227

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	3	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	13	7	0
<20 & OR <5	0	10	20	7	0
VSBY ≥5	3	47	40	3	0
≥50 & ≥5	0	33	23	0	0
NC & ≥10	0	33	20	0	0

30

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	6	0	0
<20 & OR <5	0	12	21	0	0
VSBY ≥5	1	49	46	0	0
≥50 & ≥5	1	31	22	0	0
NC & ≥10	1	30	22	0	0

67

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	2	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	9	5	0	0
<20 & OR <5	2	24	20	1	0
VSBY ≥5	8	45	42	3	0
≥50 & ≥5	5	20	17	2	0
NC & ≥10	5	20	17	2	0

179

2

WIND SPEED (KNOT

LCC - VSBY	0-3	4-10	11-21	22-33
<1.5 & OR <.5	0	+	+	0
<6 & OR <2	+	1	+	0
VSBY <2	0	0	0	0
<10 & OR <2	+	3	6	1
<20 & OR <5	1	13	24	3
VSBY ≥5	3	32	58	6
≥50 & ≥5	1	11	17	2
NC & ≥10	1	10	16	2

1

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	4	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	6	4	0
<20 & OR <5	0	2	15	6	0
VSBY ≥5	2	40	32	13	4
≥50 & ≥5	0	26	15	4	2
NC & ≥10	0	19	13	0	2

47

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	1	0	0
<6 & OR <2	0	2	4	0	0
VSBY <2	0	2	2	0	0
<10 & OR <2	2	7	9	4	0
<20 & OR <5	4	15	17	8	1
VSBY ≥5	5	34	32	16	1
≥50 & ≥5	1	20	12	9	0
NC & ≥10	1	18	11	8	0

92

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	4	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	10	4	0	0
<20 & OR <5	1	17	19	1	0
VSBY ≥5	6	54	36	2	0
≥50 & ≥5	5	29	13	1	0
NC & ≥10	5	28	12	1	0

83

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	0	2	+	1
VSBY <2	0	0	0	0	1
<10 & OR <2	1	1	3	1	1
<20 & OR <5	1	3	14	3	1
VSBY ≥5	6	31	47	9	5
≥50 & ≥5	5	27	30	6	4
NC & ≥10	4	24	27	4	3

355

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	2	1	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	6	8	2	0
<20 & OR <5	1	12	17	5	0
VSBY ≥5	9	34	41	13	2
≥50 & ≥5	7	19	21	7	2
NC & ≥10	7	18	19	7	1

399

3

WIND SPEED (KNOT

LCC - VSBY	0-3	4-10	11-21	22-33
<1.5 & OR <.5	0	0	0	0
<6 & OR <2	0	1	0	0
VSBY <2	0	0	0	0
<10 & OR <2	0	7	7	4
<20 & OR <5	2	17	20	5
VSBY ≥5	4	37	36	12
≥50 & ≥5	1	14	13	6
NC & ≥10	1	10	13	6

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	7	0	0
<6 & OR <2	0	0	7	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	7	0	0
<20 & OR <5	0	0	13	0	0
VSBY ≥5	0	33	47	20	0
≥50 & ≥5	0	33	33	20	0
NC & ≥10	0	33	33	20	0

15

41

INSUFFICIENT DATA

4

WIND SPEED (KNOT

LCC - VSBY	0-3	4-10	11-21	22-33
<1.5 & OR <.5	0	1	3	0
<6 & OR <2	0	1	4	0
VSBY <2	0	0	1	0
<10 & OR <2	0	1	9	1
<20 & OR <5	1	6	17	7
VSBY ≥5	3	20	39	20
≥50 & ≥5	1	10	14	9
NC & ≥10	1	10	12	6

Graphs represent the objective compilation of available data for specified areas without regar
The isopleth analyses (opposite page) are based on all available data subjectively adjusted w

BILITY-WIND

NOVEMBER

4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	+	2	1	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	1	6	3	+	0
<20 & OR <5	3	16	6	+	0
VSBY ≥5	18	65	14	+	0
≥50 & ≥5	14	41	7	0	0
NC & ≥10	13	39	6	0	0

1158

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	1	5	0	0	0
<20 & OR <5	4	10	0	0	0
VSBY ≥5	16	75	7	0	0
≥50 & ≥5	11	56	5	0	0
NC & ≥10	11	54	5	0	0

133

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	1	0	0
<20 & OR <5	0	2	5	0	0
VSBY ≥5	+	39	59	2	0
≥50 & ≥5	+	36	50	2	0
NC & ≥10	+	36	48	2	0

612

7

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	11	0	0
<20 & OR <5	0	12	31	0	0
VSBY ≥5	2	27	70	2	0
≥50 & ≥5	2	12	27	1	0
NC & ≥10	2	12	27	1	0

132

8

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	4	4	0	0
<20 & OR <5	+	16	14	+	0
VSBY ≥5	1	47	52	+	0
≥50 & ≥5	+	23	29	+	0
NC & ≥10	+	22	28	+	0

1316

9

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	5	5	0	0
<20 & OR <5	1	26	19	+	0
VSBY ≥5	2	59	38	+	0
≥50 & ≥5	1	16	9	0	0
NC & ≥10	1	15	8	0	0

1186

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	5	2	0	0
VSBY ≥5	5	56	39	0	0
≥50 & ≥5	5	51	37	0	0
NC & ≥10	5	51	37	0	0

41

14

INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	1	0	0
<6 & OR <2	0	1	3	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	7	9	0	0
<20 & OR <5	2	13	18	2	1
VSBY ≥5	3	40	51	5	1
≥50 & ≥5	1	22	24	2	0
NC & ≥10	1	21	22	1	0

152

16

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	7	+	0
<20 & OR <5	1	22	24	+	0
VSBY ≥5	3	50	47	1	0
≥50 & ≥5	1	12	9	+	0
NC & ≥10	1	10	7	+	0

1364

17

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	2	0	0
<20 & OR <5	1	28	5	0	0
VSBY ≥5	5	80	15	0	0
≥50 & ≥5	2	36	8	0	0
NC & ≥10	2	32	7	0	0

133

18

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	5	1	0
<20 & OR <5	1	16	21	4	0
VSBY ≥5	5	40	50	5	0
≥50 & ≥5	1	14	11	1	0
NC & ≥10	1	12	10	0	0

167

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	4	6	0	0
<20 & OR <5	0	12	21	0	0
VSBY ≥5	1	49	46	0	0
≥50 & ≥5	1	31	22	0	0
NC & ≥10	1	30	22	0	0

67

23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	1	2	2	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	9	5	0	0
<20 & OR <5	2	24	20	1	0
VSBY ≥5	8	45	42	3	0
≥50 & ≥5	5	20	17	2	0
NC & ≥10	5	20	17	2	0

179

24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	3	6	1	+
<20 & OR <5	1	13	24	3	+
VSBY ≥5	3	32	58	6	+
≥50 & ≥5	1	11	17	2	+
NC & ≥10	1	10	16	2	+

1420

25

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	+	0	+
VSBY <2	0	+	+	0	+
<10 & OR <2	+	2	4	1	+
<20 & OR <5	+	8	12	4	1
VSBY ≥5	2	24	47	23	2
≥50 & ≥5	1	14	29	17	2
NC & ≥10	1	12	26	14	1

2259

26

INSUFFICIENT DATA

27

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	1	0
<6 & OR <2	0	0	2	1	0
VSBY <2	0	0	2	+	0
<10 & OR <2	+	+	5	2	+
<20 & OR <5	+	2	14	6	1
VSBY ≥5	6	28	42	12	2
≥50 & ≥5	5	24	26	7	1
NC & ≥10	4	22	22	4	+

252

31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	0	2	+	1
VSBY <2	0	0	0	0	1
<10 & OR <2	1	1	3	1	1
<20 & OR <5	1	3	14	3	1
VSBY ≥5	6	31	47	9	5
≥50 & ≥5	5	27	30	6	4
NC & ≥10	4	24	27	4	3

355

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	+	0	0
<6 & OR <2	0	1	2	1	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	6	8	2	0
<20 & OR <5	1	12	17	5	0
VSBY ≥5	9	34	41	13	2
≥50 & ≥5	7	19	21	7	2
NC & ≥10	7	18	19	7	1

399

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	1
<6 & OR <2	0	1	0	0	2
VSBY <2	0	0	0	0	2
<10 & OR <2	0	7	7	4	2
<20 & OR <5	2	17	20	5	5
VSBY ≥5	4	37	36	12	1
≥50 & ≥5	1	14	13	6	0
NC & ≥10	1	10	13	6	0

83

34

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	4	0
<20 & OR <5	0	2	6	4	0
VSBY ≥5	2	29	58	8	0
≥50 & ≥5	2	27	38	4	0
NC & ≥10	2	23	33	4	0

52

35

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	2	7	0	0
<6 & OR <2	0	2	7	0	0
VSBY <2	0	2	5	0	0
<10 & OR <2	0	7	7	0	0
<20 & OR <5	0	12	8	5	0
VSBY ≥5	12	37	33	7	2
≥50 & ≥5	10	20	25	2	2
NC & ≥10	8	18	18	2	2

60

36

INSUFFICIENT DATA

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	7	0	0
<6 & OR <2	0	0	7	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	7	0	0
<20 & OR <5	0	0	13	0	0
VSBY ≥5	0	33	47	20	0
≥50 & ≥5	0	33	33	20	0
NC & ≥10	0	33	33	20	0

15

41

INSUFFICIENT DATA

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	1	3	0	0
<6 & OR <2	0	1	4	0	6
VSBY <2	0	0	1	0	1
<10 & OR <2	0	1	9	1	7
<20 & OR <5	1	6	17	7	9
VSBY ≥5	3	20	39	20	7
≥50 & ≥5	1	10	14	9	0
NC & ≥10	1	10	12	6	0

69

43

INSUFFICIENT DATA

44

INSUFFICIENT DATA

45

WIND SPEED (KNOTS)

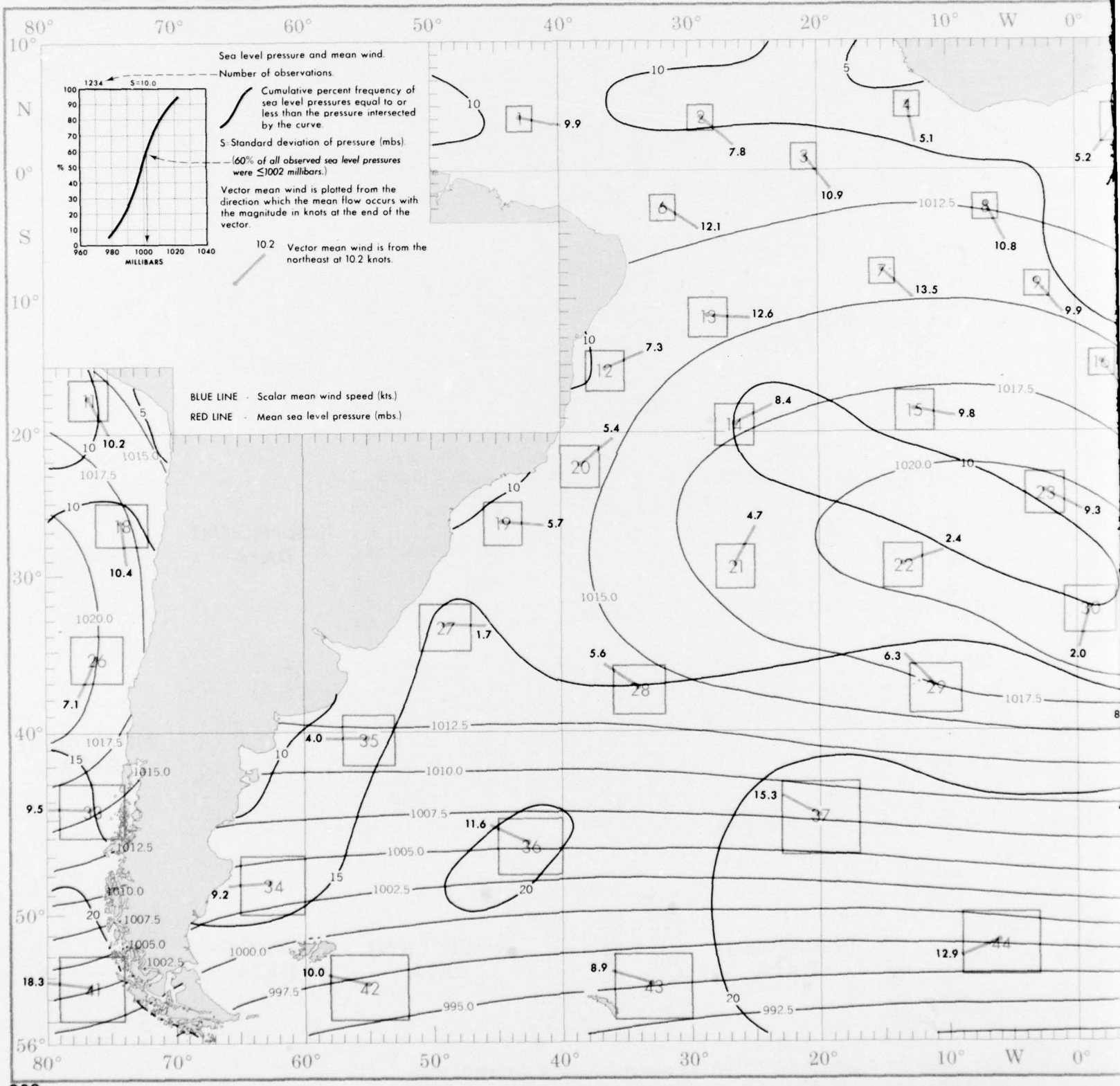
LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	6	19	0
<6 & OR <2	0	0	13	25	0
VSBY <2	0	0	13	25	0
<10 & OR <2	0	0	13	31	0
<20 & OR <5	0	0	31	31	6
VSBY ≥5	0	0	25	19	6
≥50 & ≥5	0	0	13	0	0
NC & ≥10	0	0	6	0	0

16

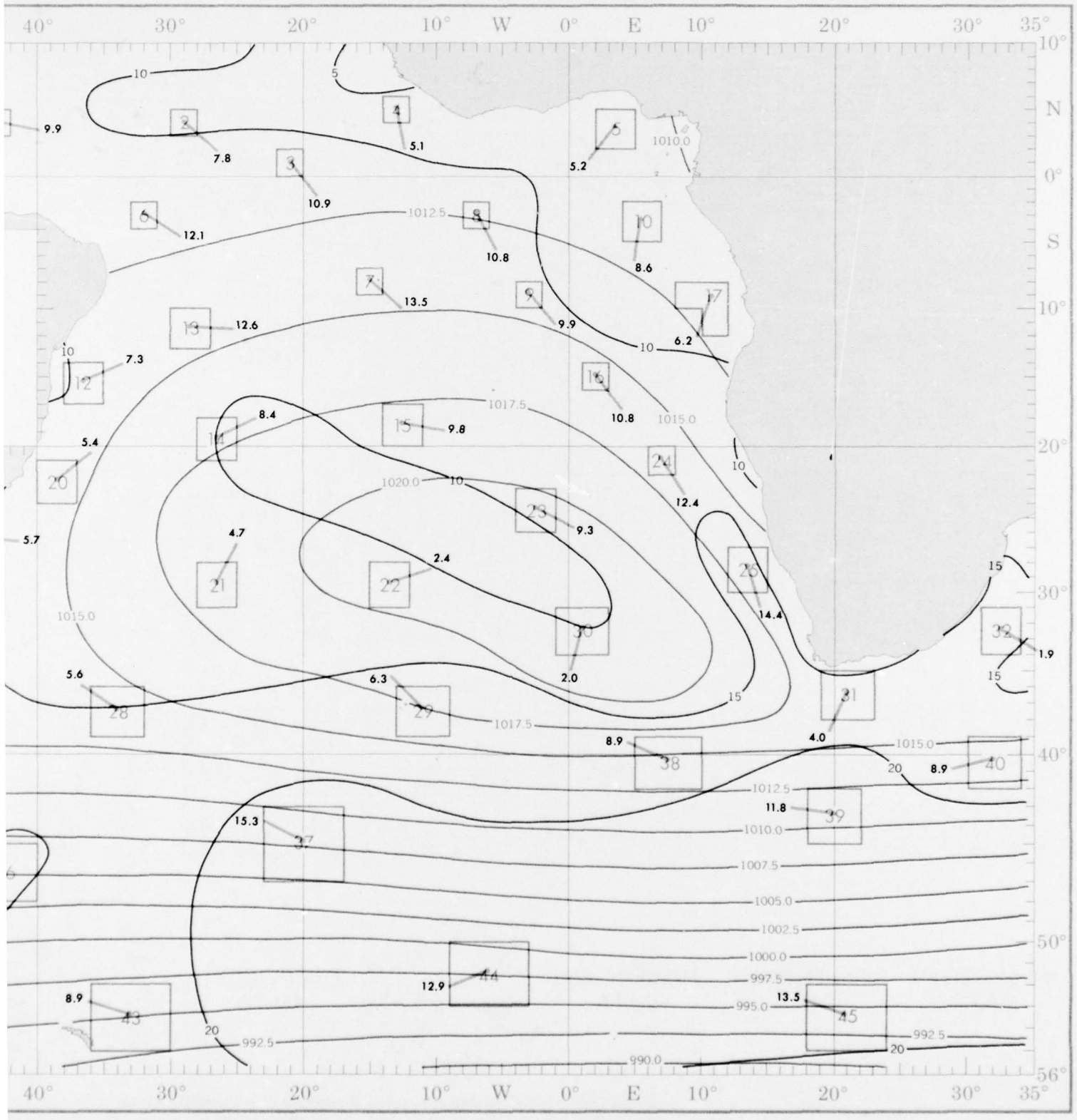
ɐe objective compilation of available data for specified areas without regard to suspected biases.
ɐs (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER

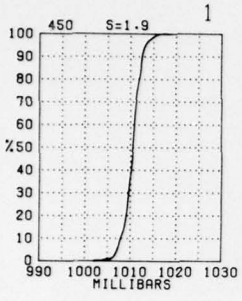
SEA LEVEL PRESS

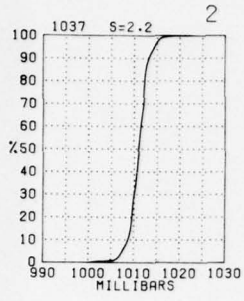


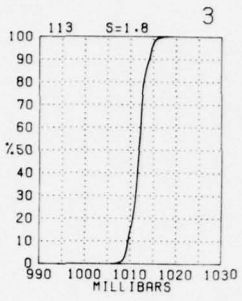
SEA LEVEL PRESSURE AND MEAN WIND

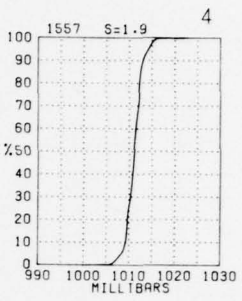


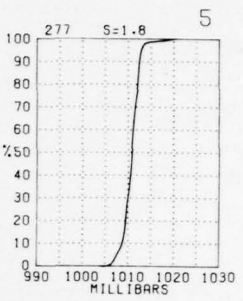
SEA LEVEL PRESSURE

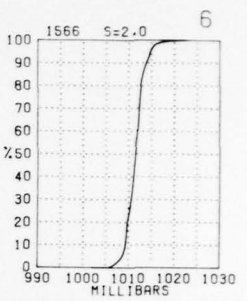


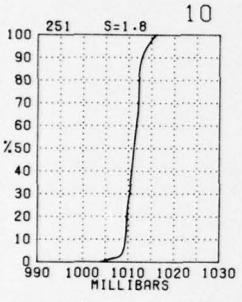


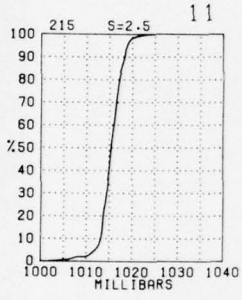


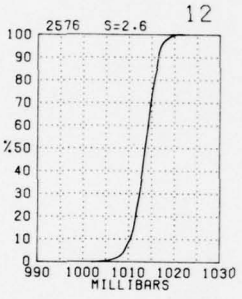


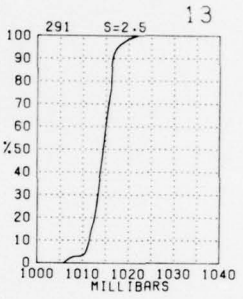


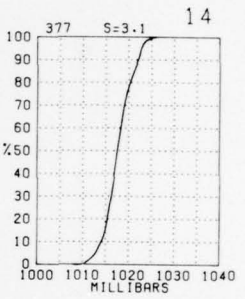


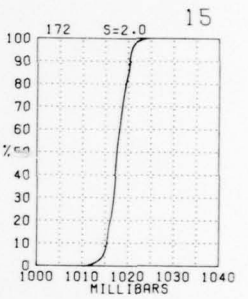


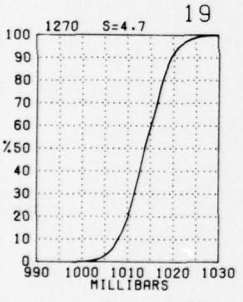


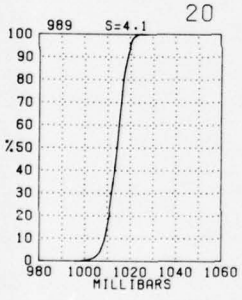


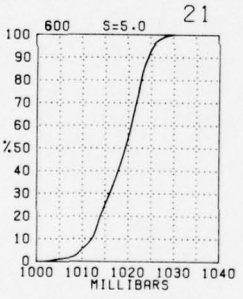


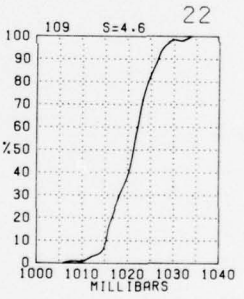


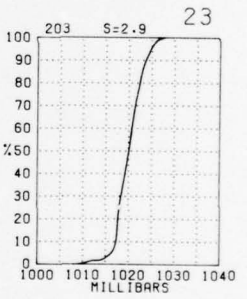


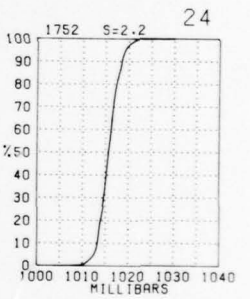


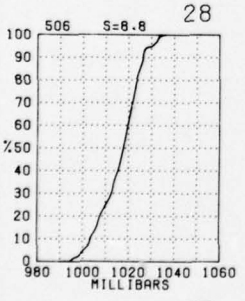


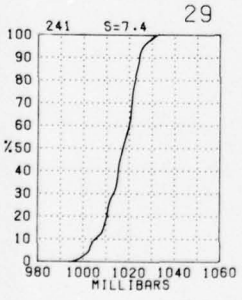


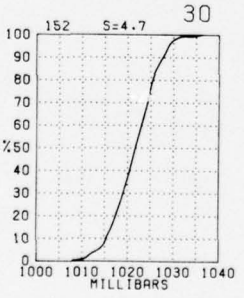


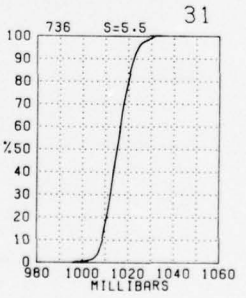


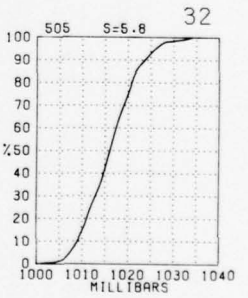


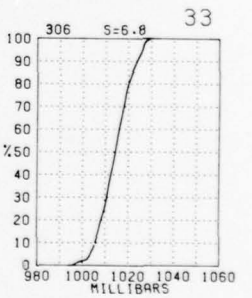






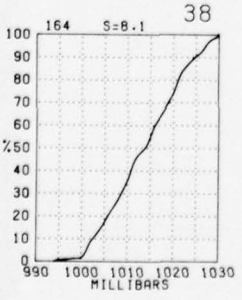


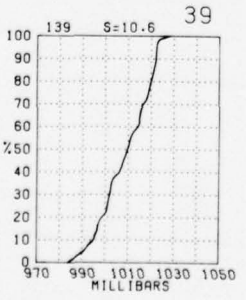


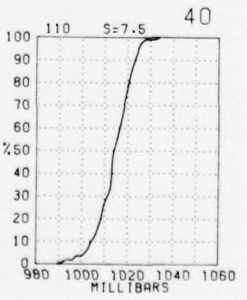


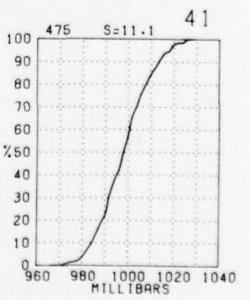
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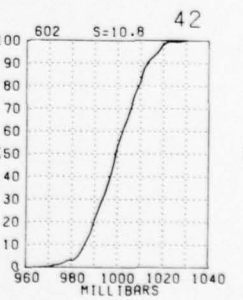
INSUFFICIENT DATA





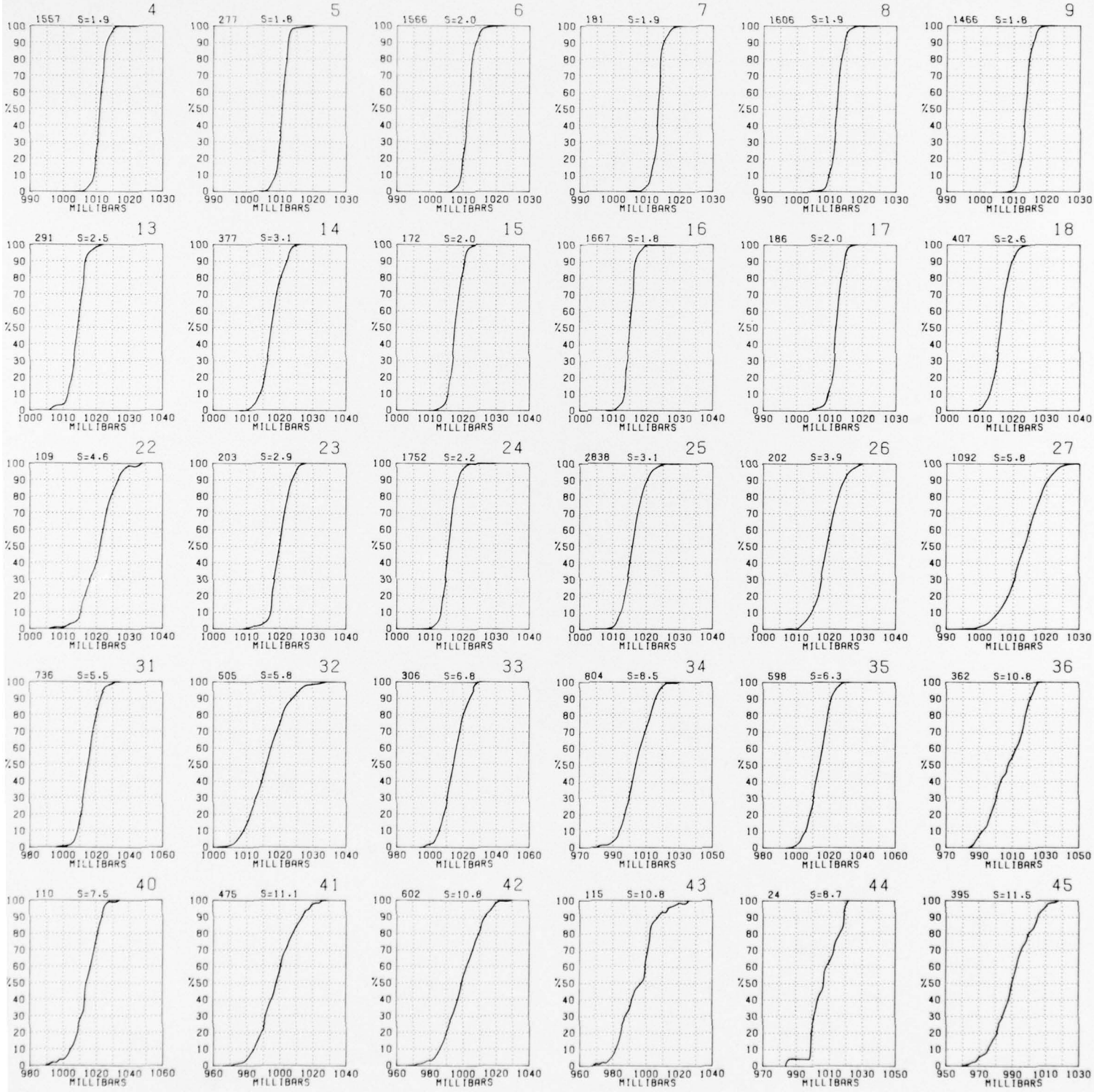






Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

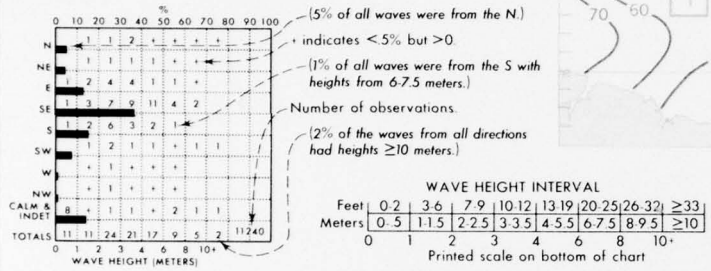
NOVEMBER



e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER

WAVES (



WAVE HEIGHT INTERVAL

Feet	0-2	3-6	7-9	10-12	13-19	20-25	26-32	≥33
Meters	0-.5	1-1.5	2-2.5	3-3.5	4-5.5	6-7.5	8-9.5	≥10

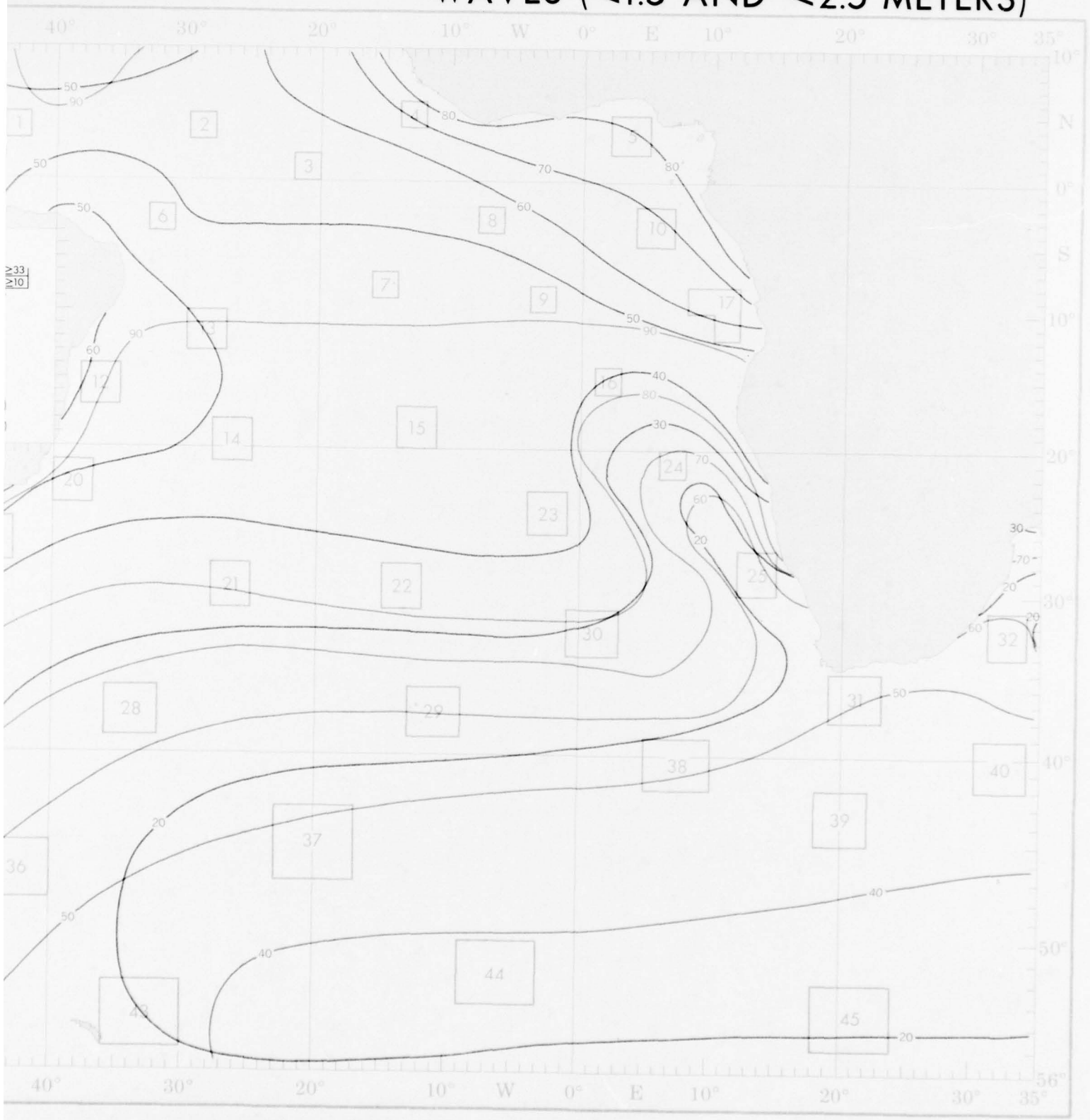
0 1 2 3 4 6 8 10+

Printed scale on bottom of chart

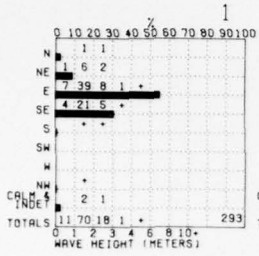
BLUE LINE - Percent frequency of wave height <1.5 meters (5 feet)

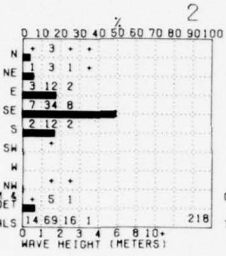
RED LINE - Percent frequency of wave height <2.5 meters (8 feet)

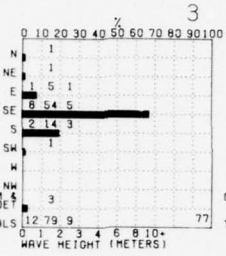
WAVES (<1.5 AND <2.5 METERS)

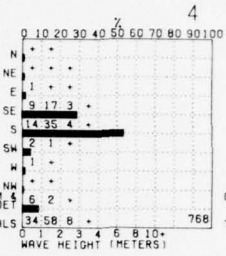


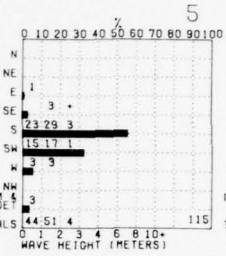
WAVE DIRECTION AND HEIGHT

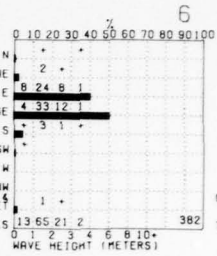


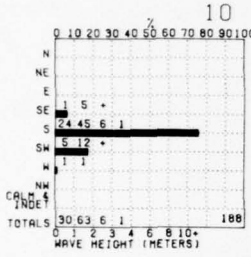


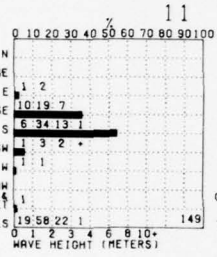


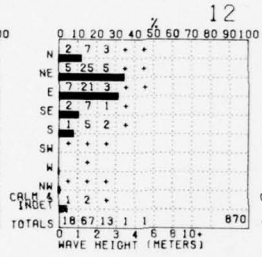


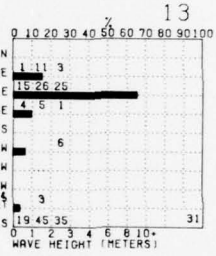






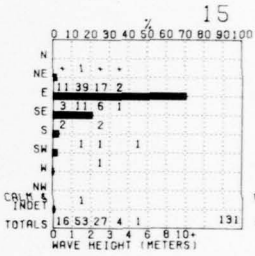


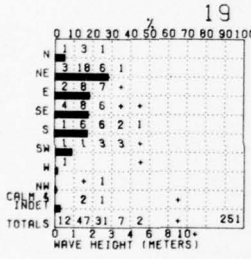


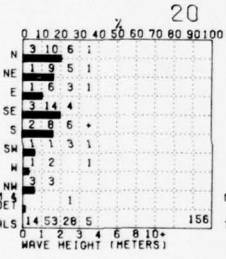


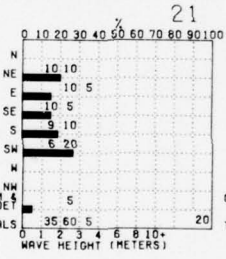
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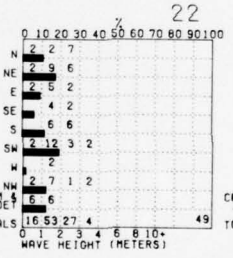
INSUFFICIENT DATA

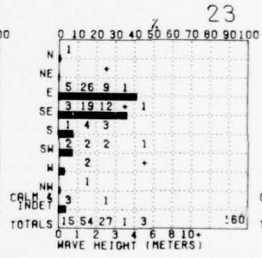


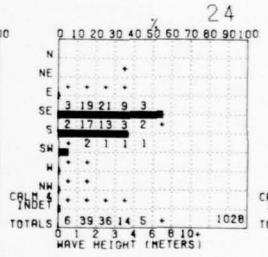






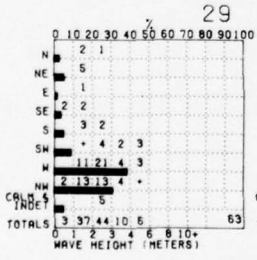


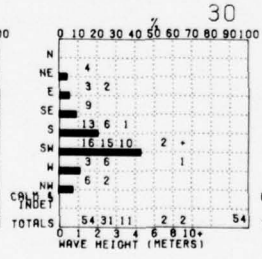


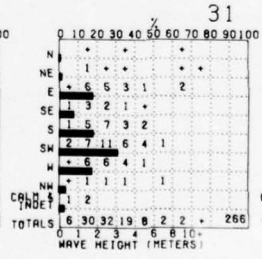


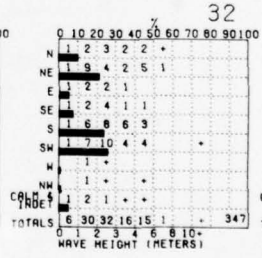
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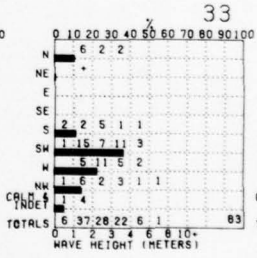
INSUFFICIENT DATA











37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

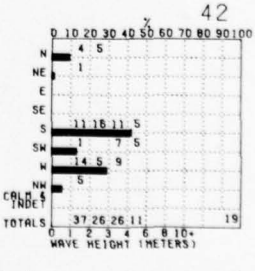
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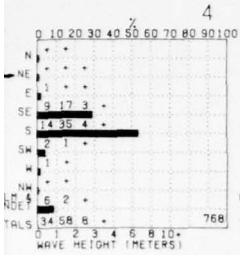
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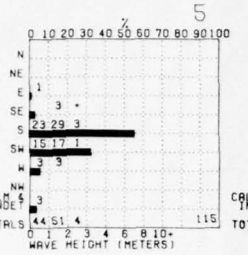
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Graphs represent the objective compilation of available data for specified areas without regard to suspec
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

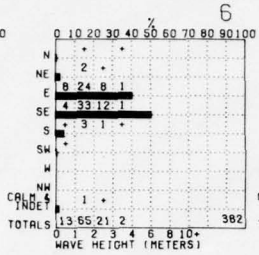
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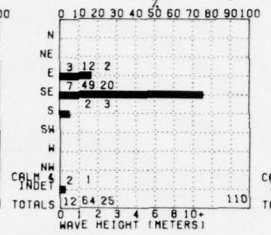
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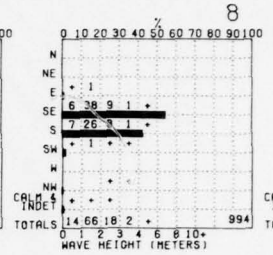
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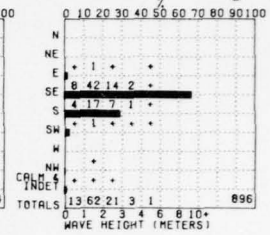
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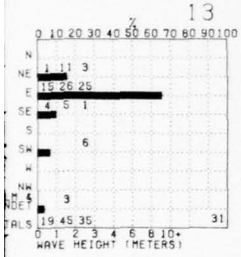
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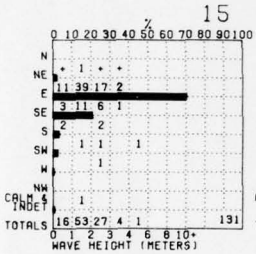
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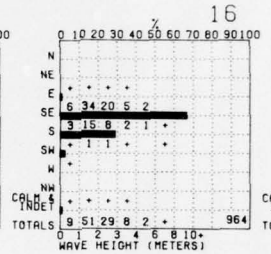
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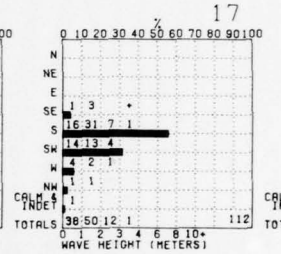
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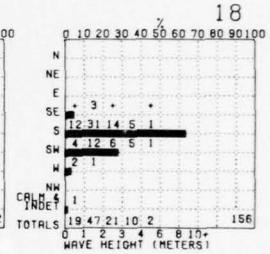
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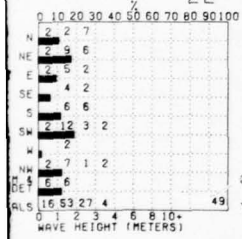
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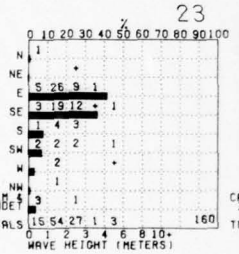
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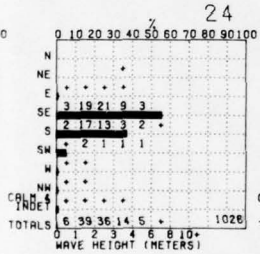
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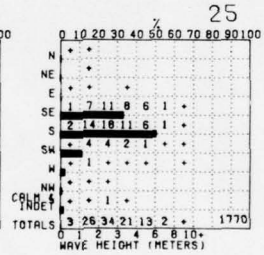
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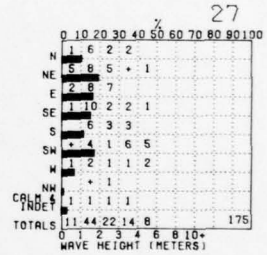
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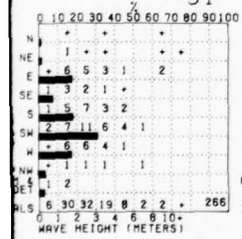
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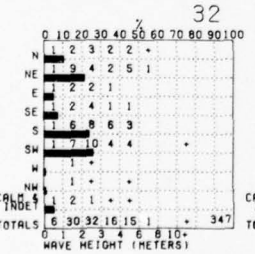
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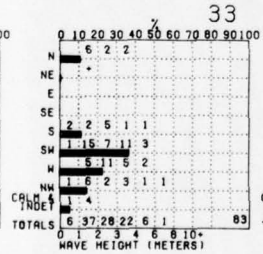
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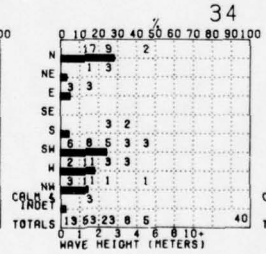
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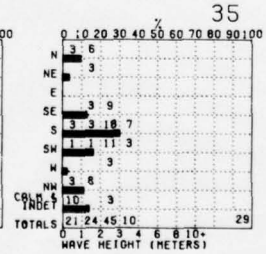
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36

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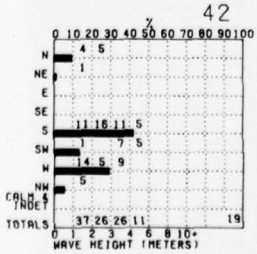
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43

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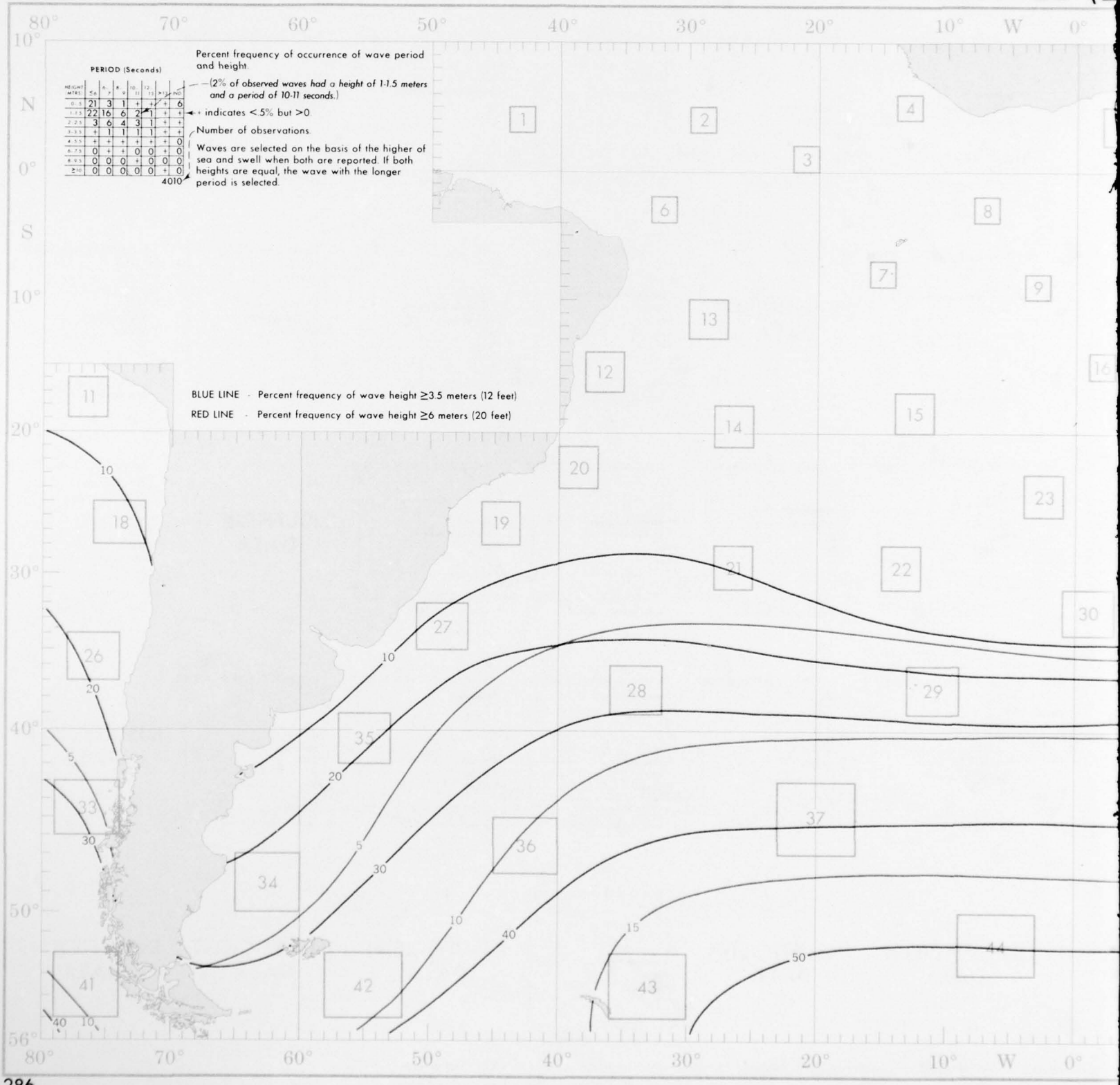
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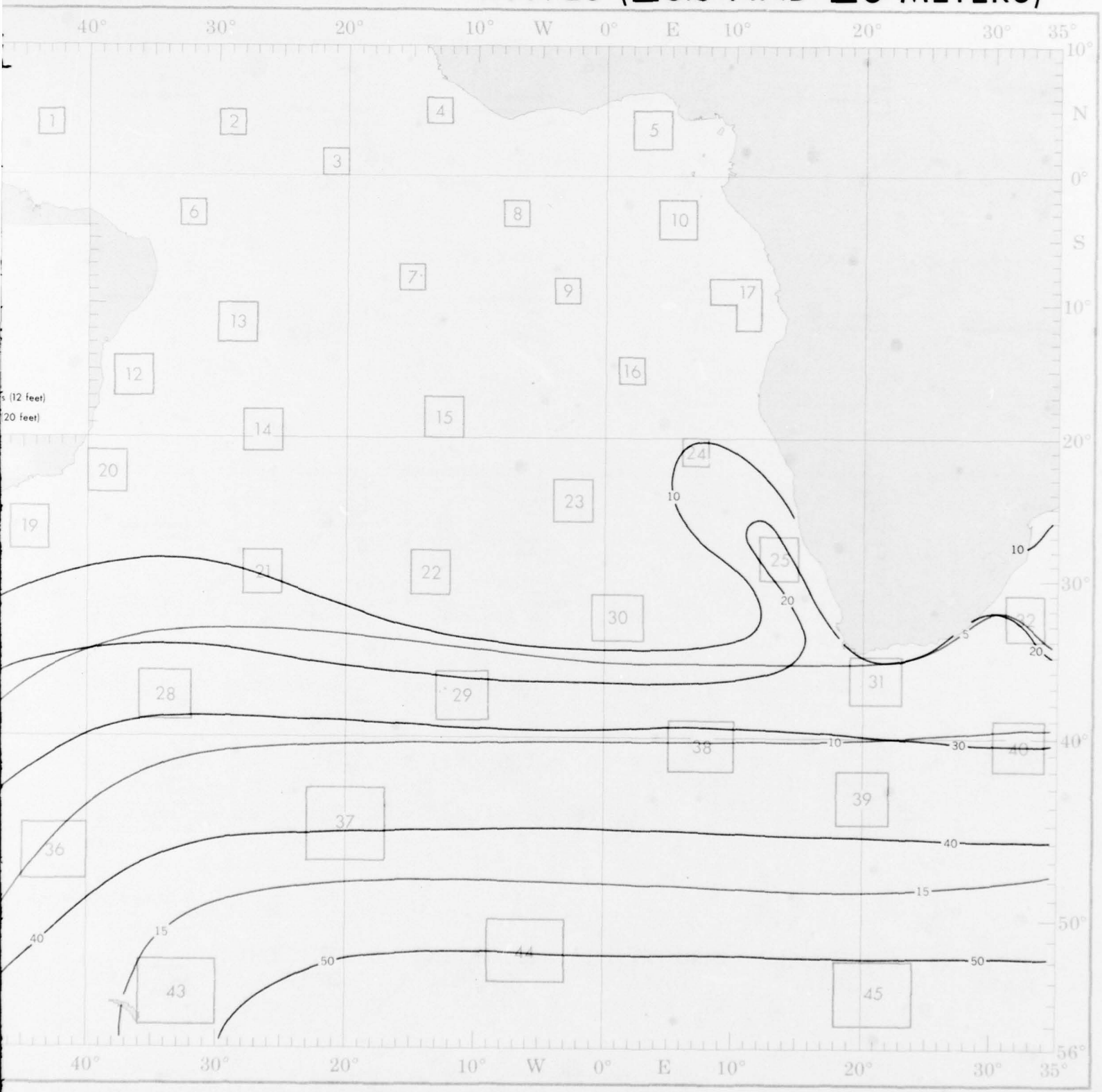
objective compilation of available data for specified areas without regard to suspected biases
(opposite page) are based on all available data subjectively adjusted where bias was evident.

NOVEMBER

WAVES (≥



WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	+	1	0	0	1
1-1.5	28	31	5	1	+	+	2
2-2.5	2	7	5	1	1	+	1
3-3.5	0	+	+	0	+	0	0
4-5.5	0	0	0	0	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

302

2

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	0	0	0	0	4
1-1.5	32	16	5	2	+	0	10
2-2.5	4	6	2	+	1	0	2
3-3.5	+	0	+	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

225

3

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	1	4	0	0	0	0
1-1.5	38	25	8	4	0	0	3
2-2.5	1	1	4	3	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

80

4

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	3	1	1	0	0	12
1-1.5	21	18	6	2	2	1	7
2-2.5	1	3	2	1	0	1	1
3-3.5	+	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

795

5

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	23	10	2	1	0	0	11
1-1.5	18	15	8	5	1	0	3
2-2.5	0	3	1	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

120

6

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	+	0	0	0	0	1
1-1.5	30	16	5	1	2	1	9
2-2.5	4	11	4	1	1	0	1
3-3.5	0	2	0	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

385

10

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	5	1	0	0	0	5
1-1.5	24	20	6	4	3	3	3
2-2.5	1	2	2	2	0	0	1
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

191

11

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	3	1	1	0	0	3
1-1.5	28	20	5	2	1	0	2
2-2.5	3	3	9	3	1	2	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

149

12

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	1	+	0	0	0	5
1-1.5	29	23	6	1	1	+	6
2-2.5	3	5	3	1	1	+	1
3-3.5	+	+	+	0	+	0	+
4-5.5	0	0	+	0	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

898

13

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	6	3	0	0	0	0
1-1.5	24	15	0	0	0	0	3
2-2.5	6	18	6	0	3	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

34

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	1	0	0	0	0	1
1-1.5	24	19	6	1	1	0	0
2-2.5	12	7	5	0	1	0	0
3-3.5	0	1	2	1	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

135

19

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	0	0	0	0	+
1-1.5	19	17	2	1	+	+	5
2-2.5	2	14	7	4	1	0	3
3-3.5	+	2	4	1	0	0	0
4-5.5	0	+	1	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

255

20

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	1	0	1	0	0	1
1-1.5	26	18	6	2	0	0	1
2-2.5	3	12	6	3	1	0	3
3-3.5	0	0	3	2	0	0	1
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

157

21

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	5	15	5	5	5	0	0
2-2.5	10	15	10	15	5	0	5
3-3.5	0	5	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

20

22

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	0	2	0	0	0	4
1-1.5	18	22	6	0	0	0	6
2-2.5	0	12	14	0	0	0	0
3-3.5	4	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

49

23

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	0	0	0	0	3
1-1.5	24	18	4	2	5	1	0
2-2.5	1	9	8	5	1	2	1
3-3.5	0	1	0	1	0	0	0
4-5.5	0	0	1	1	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

161

24

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	+	0	0	0	1
1-1.5	13	13	6	1	1	1	4
2-2.5	7	13	7	3	1	1	3
3-3.5	2	4	5	1	1	+	1
4-5.5	+	1	2	1	+	+	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1032

28

INSUFFICIENT DATA

29

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	2	0	0	0
1-1.5	8	25	2	0	2	0	0
2-2.5	2	30	8	2	0	0	3
3-3.5	0	2	2	5	0	0	2
4-5.5	0	0	3	2	0	0	2
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

63

30

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	19	26	4	2	4	0	0
2-2.5	2	7	13	7	2	0	0
3-3.5	2	7	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	2	0	0	0	0
8-9.5	0	0	0	0	0	2	0
≥10	0	0	0	0	0	0	0

54

31

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	2	0	1	0	0	2
1-1.5	12	10	4	2	0	0	3
2-2.5	5	13	7	4	1	0	1
3-3.5	3	6	5	4	0	1	1
4-5.5	+	1	3	2	1	2	0
6-7.5	0	+	+	+	0	0	+
8-9.5	0	+	0	0	0	2	0
≥10	0	0	+	0	0	0	0

267

32

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	0	0	0	3
1-1.5	10	9	5	1	+	+	4
2-2.5	5	10	10	3	1	1	1
3-3.5	1	6	5	2	1	1	1
4-5.5	1	3	3	3	3	1	1
6-7.5	0	+	0	0	0	+	+
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	+	0	0

352

33

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	1
1-1.5	12	17	5	0	1	0	2
2-2.5	4	5	12	4	4	0	0
3-3.5	0	5	6	2	4	0	5
4-5.5	0	1	2	0	1	0	1
6-7.5	0	1	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

83

37

INSUFFICIENT DATA

38

INSUFFICIENT DATA

39

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

HEIGHT (MTRS)	PERIOD (SECONDS) <6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	21	11	0	0	0	0	5
2-2.5	0	16	5	0	0	0	5
3-3.5	0	16	11	0	0	0	0
4-5.5	0	0	11	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

19

INS

Graphs represent the objective compilation of available data for specified areas without regard to suspe
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	3	1	1	0	0	12
1-1.5	21	18	6	2	2	1	7
2-2.5	1	3	2	1	0	1	1
3-3.5	+	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

795

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	23	10	2	1	0	0	11
1-1.5	18	15	8	5	1	0	3
2-2.5	0	3	1	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

120

6

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	+	0	0	0	0	1
1-1.5	30	16	5	1	2	1	9
2-2.5	4	11	4	1	1	0	1
3-3.5	0	2	0	0	+	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

385

7

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	2	0	0	0	0	2
1-1.5	34	17	7	1	1	0	4
2-2.5	4	12	8	0	0	1	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

110

8

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	2	+	+	0	0	3
1-1.5	28	21	6	2	2	1	7
2-2.5	5	7	3	1	+	1	1
3-3.5	1	1	1	0	+	0	0
4-5.5	0	+	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1000

9

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	1	+	+	0	0	3
1-1.5	22	20	7	3	3	1	5
2-2.5	5	8	4	1	1	1	1
3-3.5	+	1	1	+	+	+	0
4-5.5	0	+	+	1	+	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

908

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	18	6	3	0	0	0	0
1-1.5	24	15	0	0	0	0	3
2-2.5	6	18	6	0	3	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

34

14

INSUFFICIENT DATA

15

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	1	0	0	0	0	1
1-1.5	24	19	6	1	1	0	0
2-2.5	12	7	5	0	1	0	0
3-3.5	0	1	2	1	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

135

16

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	1	+	0	0	3
1-1.5	20	16	7	2	1	1	4
2-2.5	5	10	8	2	1	1	1
3-3.5	1	2	3	1	1	+	1
4-5.5	+	+	1	+	+	0	0
6-7.5	0	0	0	0	0	+	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

969

17

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	32	1	3	0	0	0	4
1-1.5	19	15	5	6	2	0	2
2-2.5	1	2	4	3	1	0	1
3-3.5	1	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

116

18

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	1	1	1	0	0	3
1-1.5	17	18	9	1	1	0	1
2-2.5	4	8	4	3	1	1	0
3-3.5	0	2	1	3	3	1	0
4-5.5	1	1	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

160

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	10	0	2	0	0	0	4
1-1.5	18	22	6	0	0	0	6
2-2.5	0	12	14	0	0	0	0
3-3.5	4	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

49

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	2	0	0	0	0	3
1-1.5	24	18	4	2	5	1	0
2-2.5	1	9	8	5	1	2	1
3-3.5	0	1	0	1	0	0	0
4-5.5	0	0	1	1	1	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

161

24

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	1	+	0	0	0	1
1-1.5	13	13	6	1	1	1	4
2-2.5	7	13	7	3	1	1	3
3-3.5	2	4	5	1	1	+	1
4-5.5	+	1	2	1	+	+	+
6-7.5	0	0	+	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1032

25

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	+	+	0	0	1
1-1.5	9	8	3	2	1	+	4
2-2.5	7	10	8	4	2	1	3
3-3.5	2	8	5	2	1	1	2
4-5.5	1	4	4	2	1	+	1
6-7.5	0	1	+	+	+	+	0
8-9.5	0	0	+	+	0	0	0
≥10	0	0	0	0	0	0	0

1774

26

INSUFFICIENT DATA

27

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	1	0	0	1
1-1.5	19	19	3	1	1	0	2
2-2.5	7	10	5	0	0	0	0
3-3.5	1	3	5	2	0	1	1
4-5.5	0	1	2	4	1	0	1
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

178

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	2	0	1	0	0	2
1-1.5	12	10	4	2	0	0	3
2-2.5	5	13	7	4	1	0	1
3-3.5	3	6	5	4	0	1	1
4-5.5	+	1	3	2	1	2	0
6-7.5	0	+	+	+	0	0	+
8-9.5	0	+	0	0	0	2	0
≥10	0	0	+	0	0	0	0

267

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	0	0	0	3
1-1.5	10	9	5	1	+	+	4
2-2.5	5	10	10	3	1	1	1
3-3.5	1	6	5	2	1	1	1
4-5.5	1	3	3	3	3	1	1
6-7.5	0	+	0	0	0	+	+
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	+	0	0

352

33

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	1
1-1.5	12	17	5	0	1	0	2
2-2.5	4	5	12	4	4	0	0
3-3.5	0	5	6	2	4	0	5
4-5.5	0	1	2	0	1	0	1
6-7.5	0	1	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

83

34

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	0	0	0	0	0	0
1-1.5	35	10	3	0	3	0	3
2-2.5	10	10	0	0	0	0	3
3-3.5	3	0	3	0	0	0	3
4-5.5	0	3	0	0	0	0	3
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

40

35

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	25	0	0	0	0	0	3
1-1.5	16	3	3	0	0	0	0
2-2.5	3	16	22	0	0	0	0
3-3.5	3	3	3	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

32

36

INSUFFICIENT DATA

40

INSUFFICIENT DATA

41

INSUFFICIENT DATA

42

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	21	11	0	0	0	0	5
2-2.5	0	16	5	0	0	0	5
3-3.5	0	16	11	0	0	0	0
4-5.5	0	0	11	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

19

43

INSUFFICIENT DATA

44

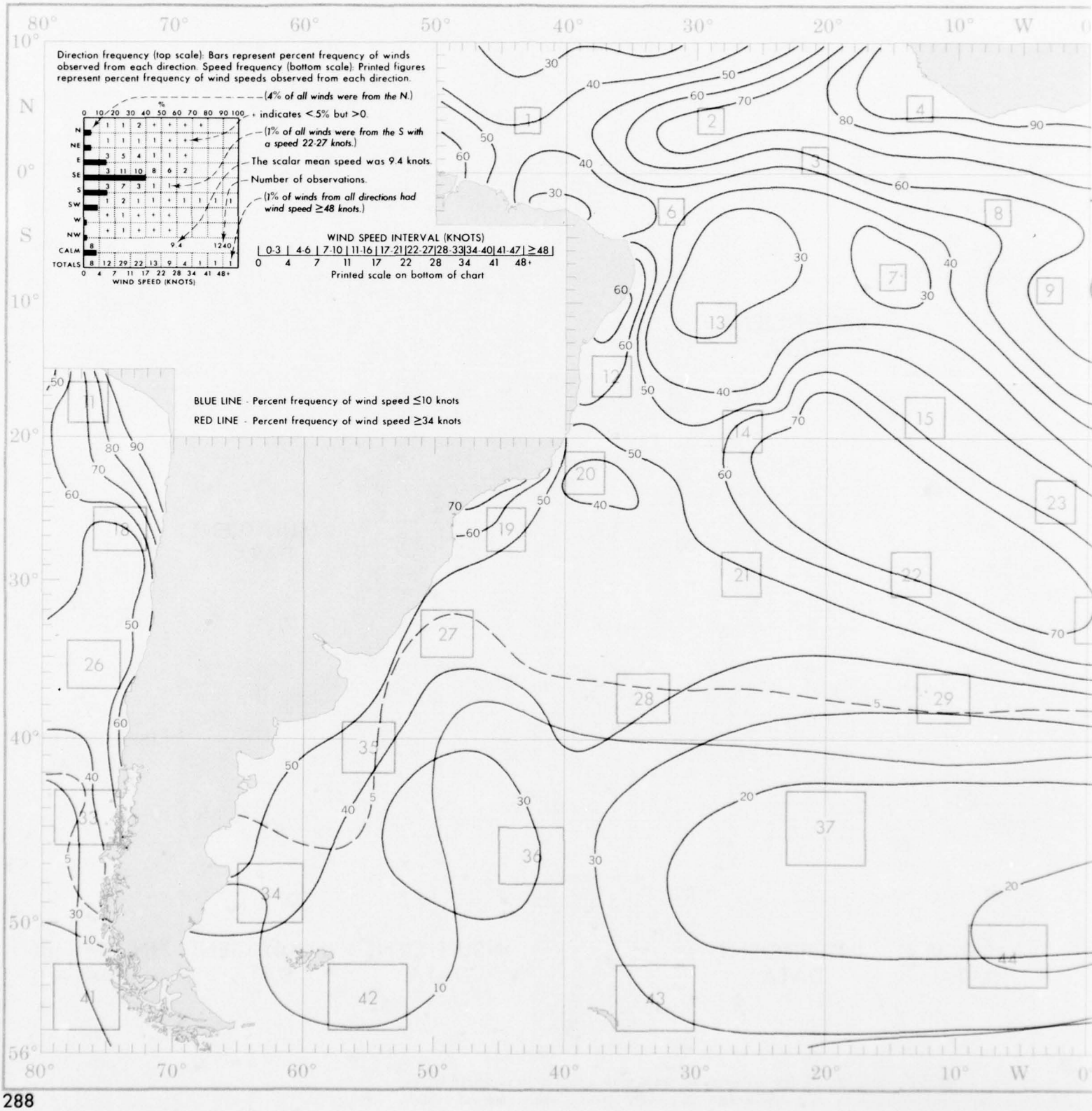
INSUFFICIENT DATA

45

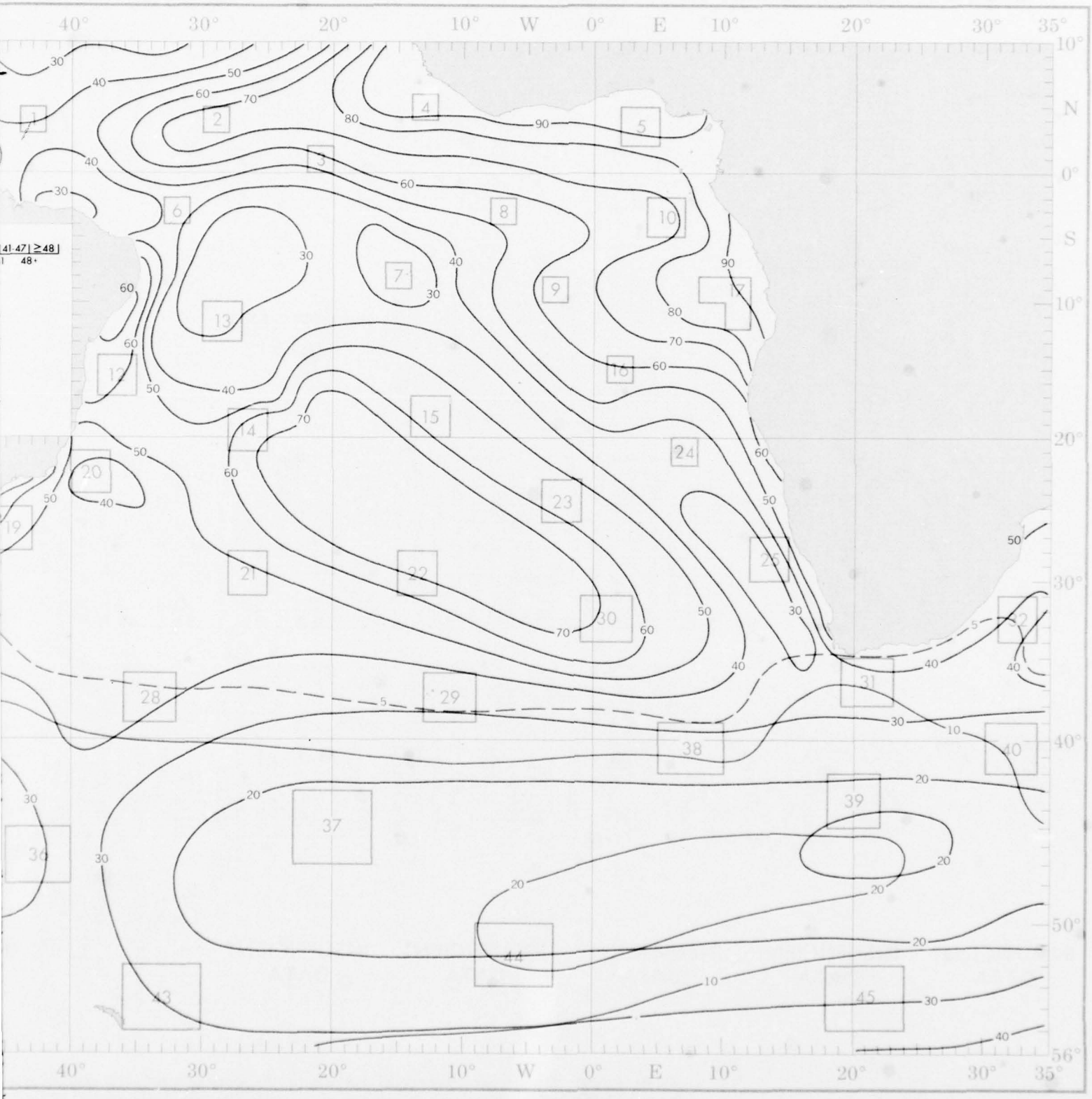
INSUFFICIENT DATA

t the objective compilation of available data for specified areas without regard to suspected biases.
lyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

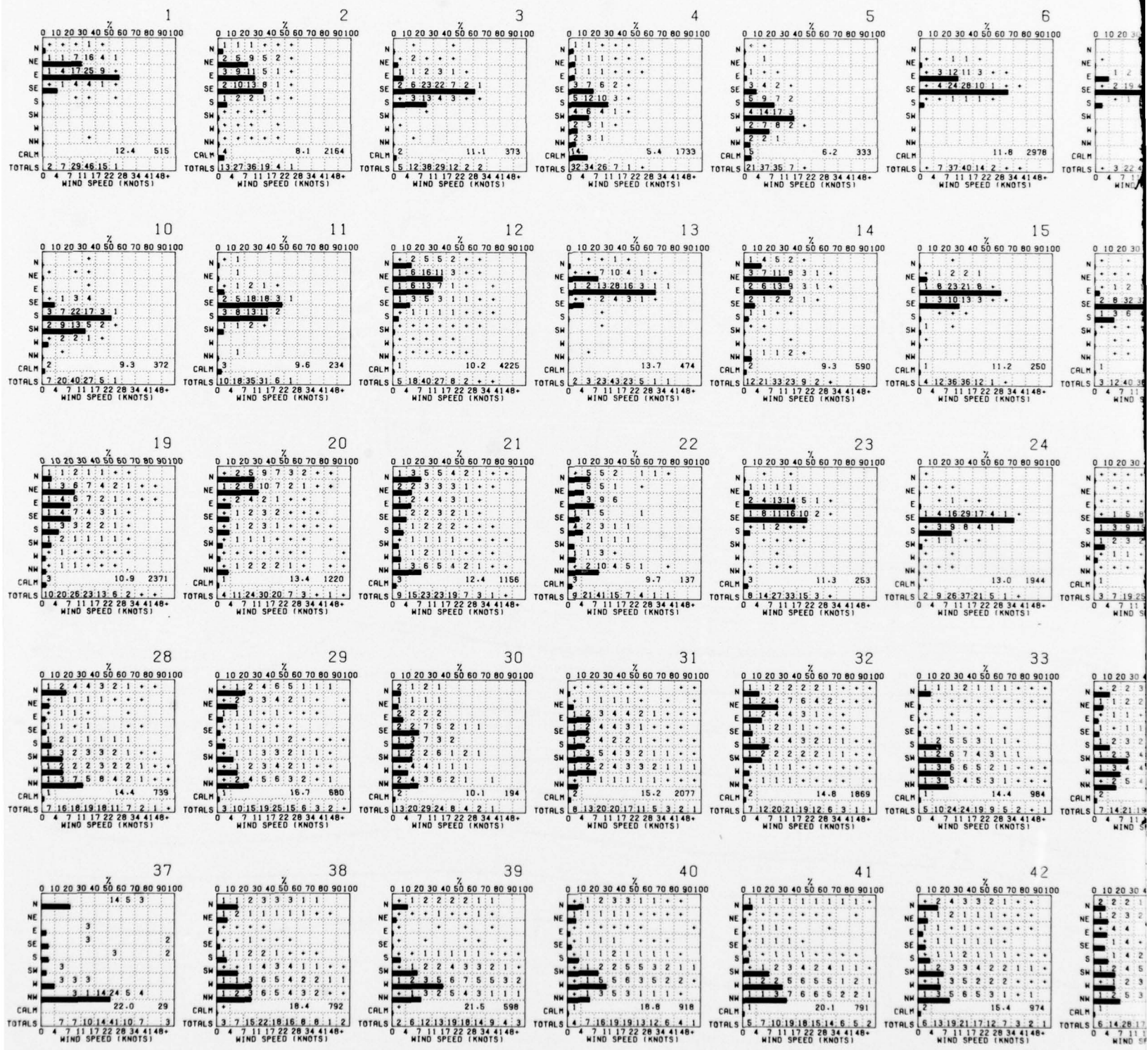
DECEMBER


Direction frequency (top scale): Bars represent percent frequency of winds observed from each direction. Speed frequency (bottom scale): Printed figures represent percent frequency of wind speeds observed from each direction.
(4% of all winds were from the N.)
+ indicates <.5% but >0.
(1% of all winds were from the S with a speed 22-27 knots.)
The scalar mean speed was 9.4 knots.
Number of observations.
(1% of winds from all directions had wind speed ≥48 knots.)
WIND SPEED (KNOTS)
WIND SPEED INTERVAL (KNOTS)
0-3 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | ≥48
0 4 7 11 17 22 28 34 41 48+
Printed scale on bottom of chart
BLUE LINE - Percent frequency of wind speed ≤10 knots
RED LINE - Percent frequency of wind speed ≥34 knots

SURFACE WINDS

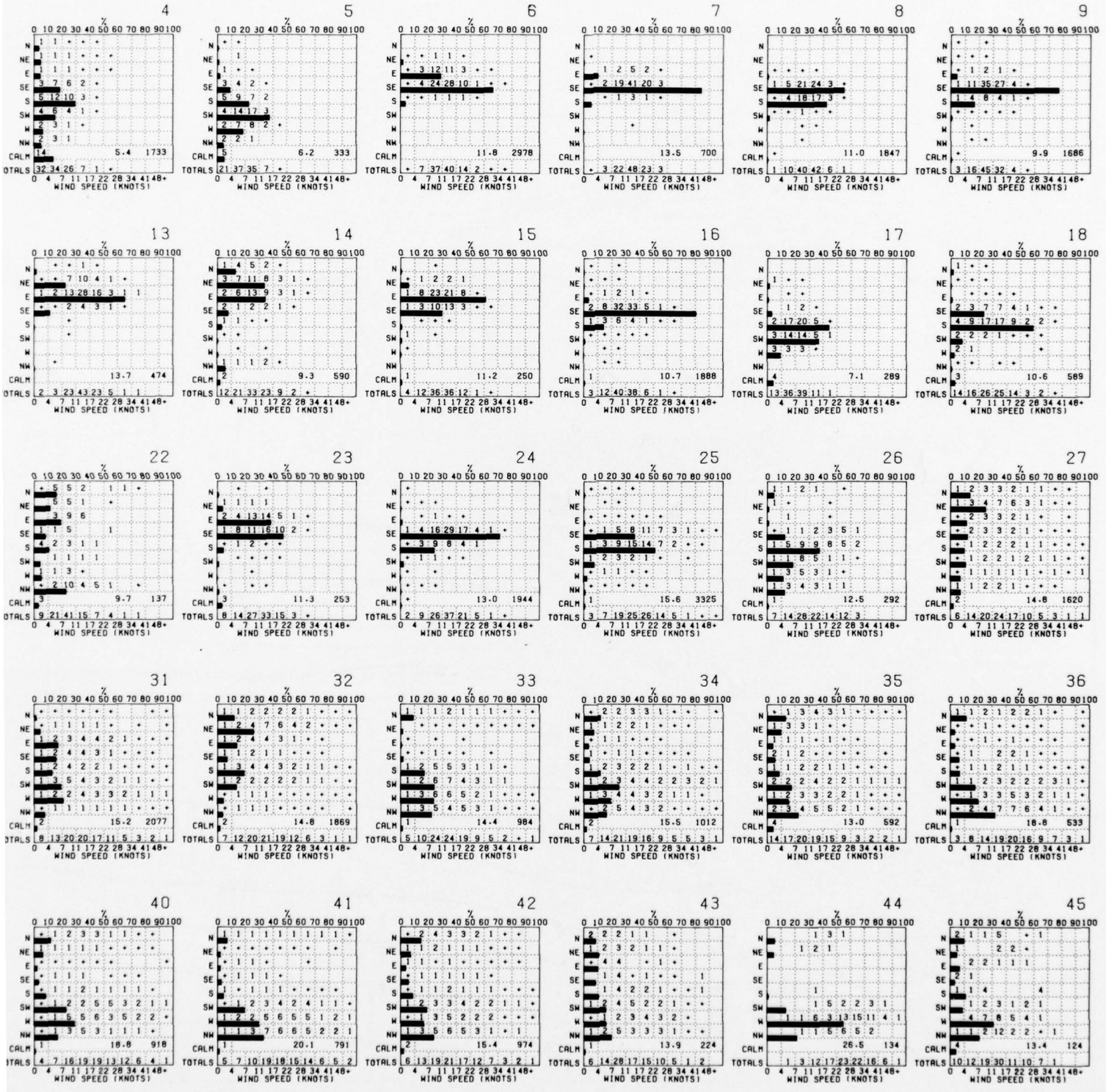


WIND DIRECTION AND SPEED



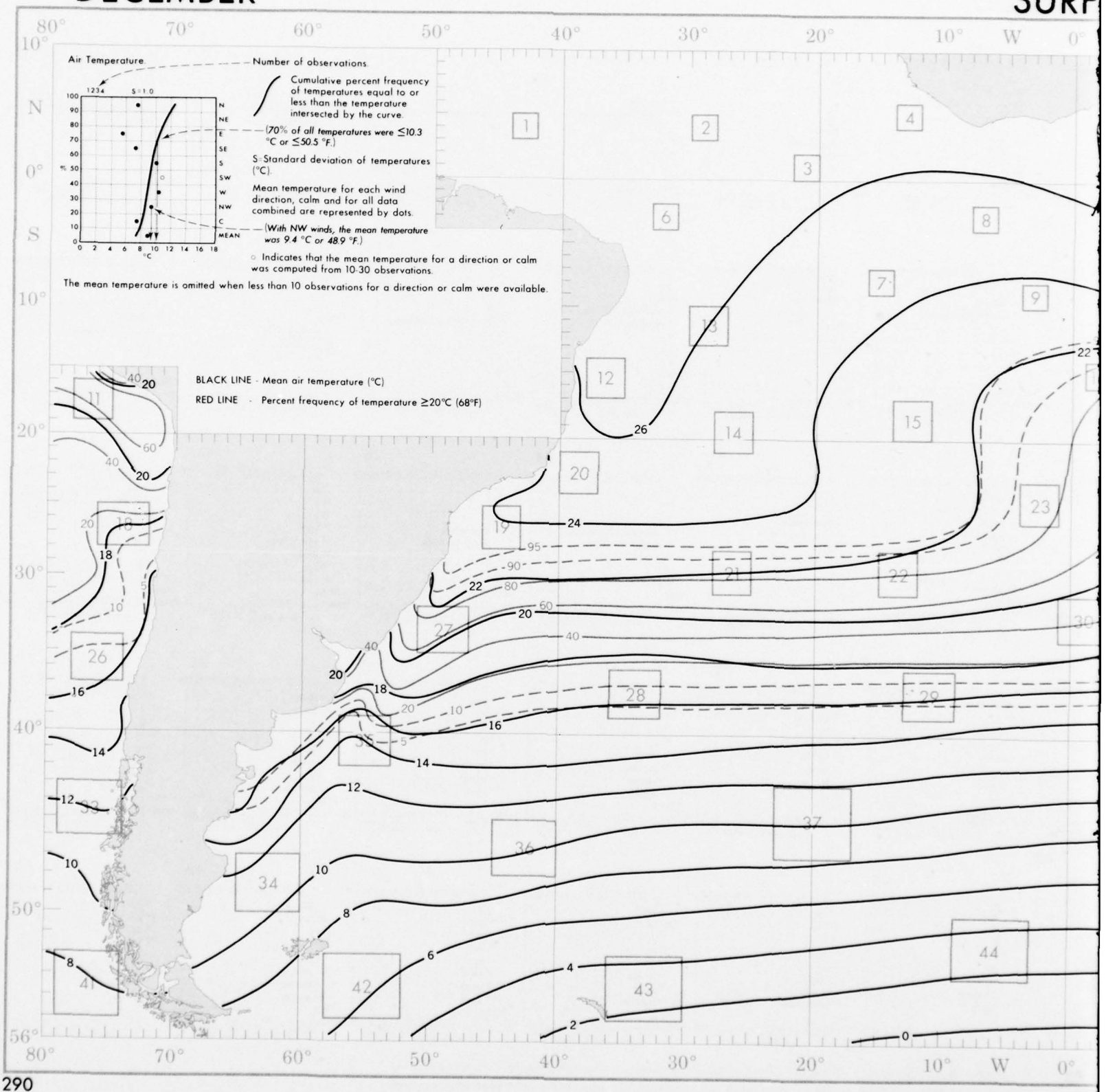
Graphs represent the objective compilation of available data for specified areas without regard to suspected b
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias was e

DECEMBER

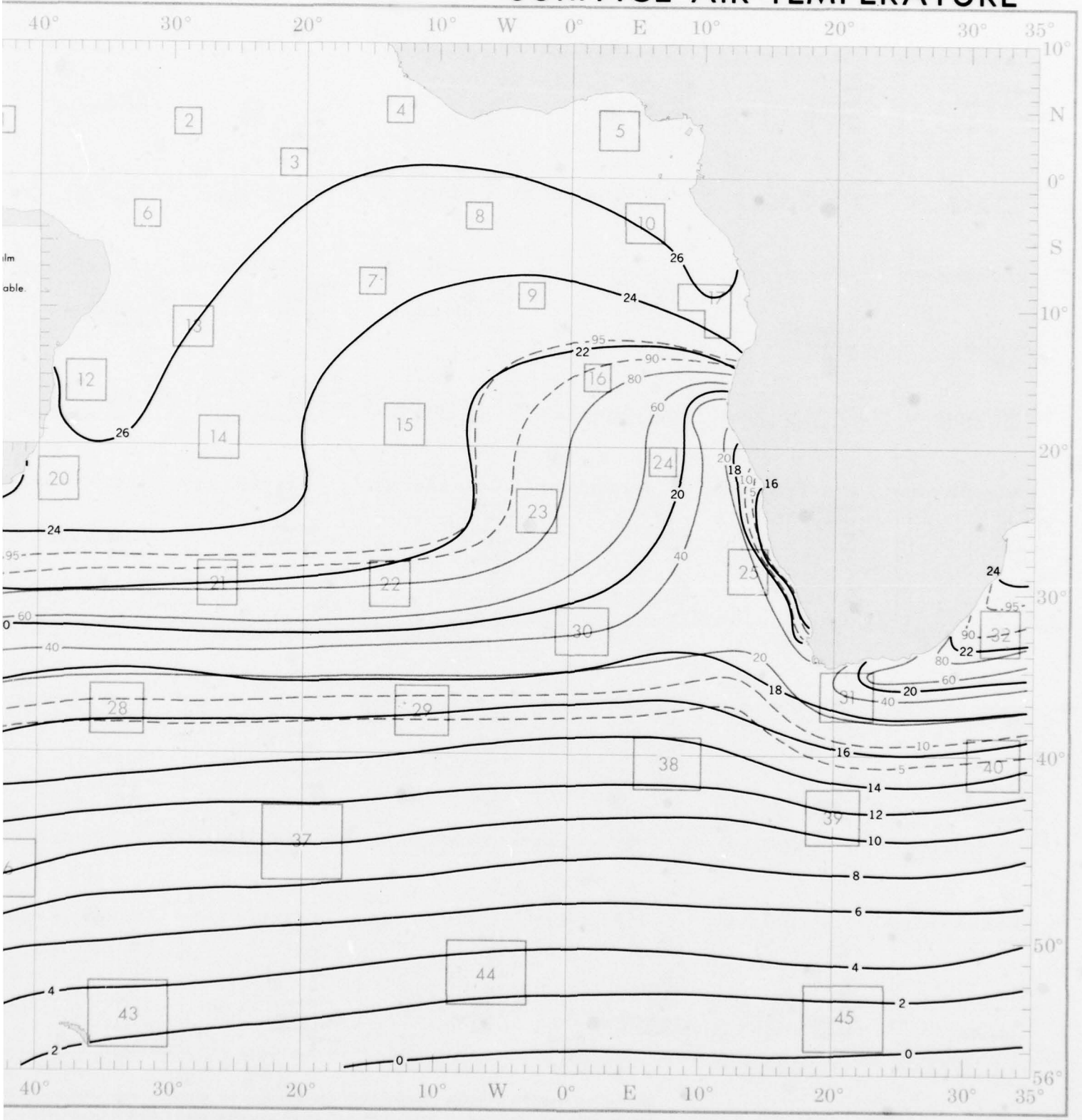


e objective compilation of available data for specified areas without regard to suspected biases.
s (opposite page) are based on all available data subjectively adjusted where bias was evident.

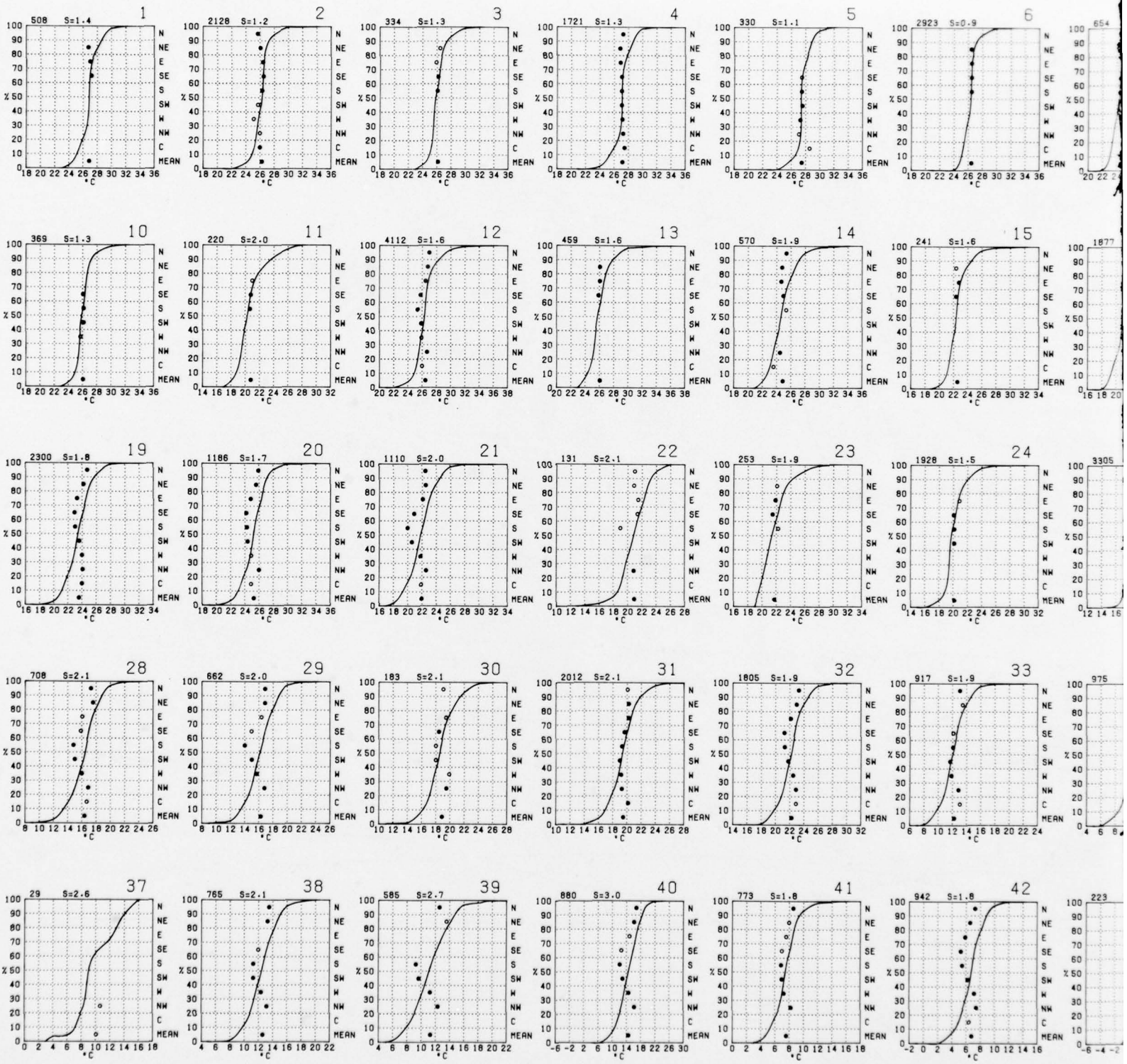
DECEMBER


Air Temperature
Number of observations.
1234
S=1.0
Cumulative percent frequency of temperatures equal to or less than the temperature intersected by the curve.
(70% of all temperatures were ≤10.3 °C or ≤50.5 °F.)
S=Standard deviation of temperatures (°C).
Mean temperature for each wind direction, calm and for all data combined are represented by dots.
(With NW winds, the mean temperature was 9.4 °C or 48.9 °F.)
○ Indicates that the mean temperature for a direction or calm was computed from 10-30 observations.
The mean temperature is omitted when less than 10 observations for a direction or calm were available.
N
NE
E
SE
S
SW
W
NW
C
MEAN
%
°C
BLACK LINE - Mean air temperature (°C)
RED LINE - Percent frequency of temperature ≥20°C (68°F)
80°
70°
60°
50°
40°
30°
20°
10°
W
0°
10° N
0°
S
10°
20°
30°
40°
50°
56°

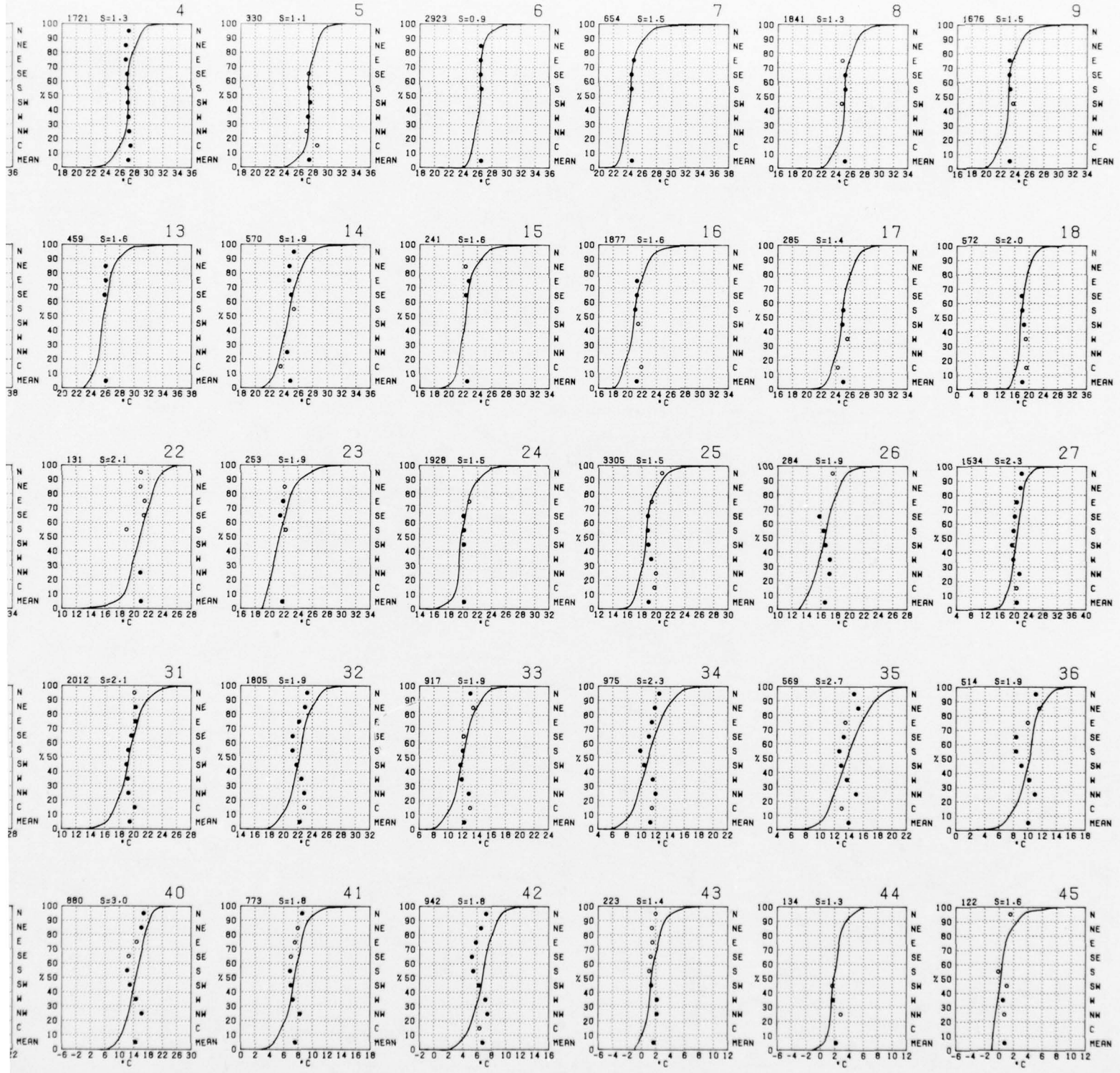
SURFACE AIR TEMPERATURE



SURFACE AIR TEMPERATURE



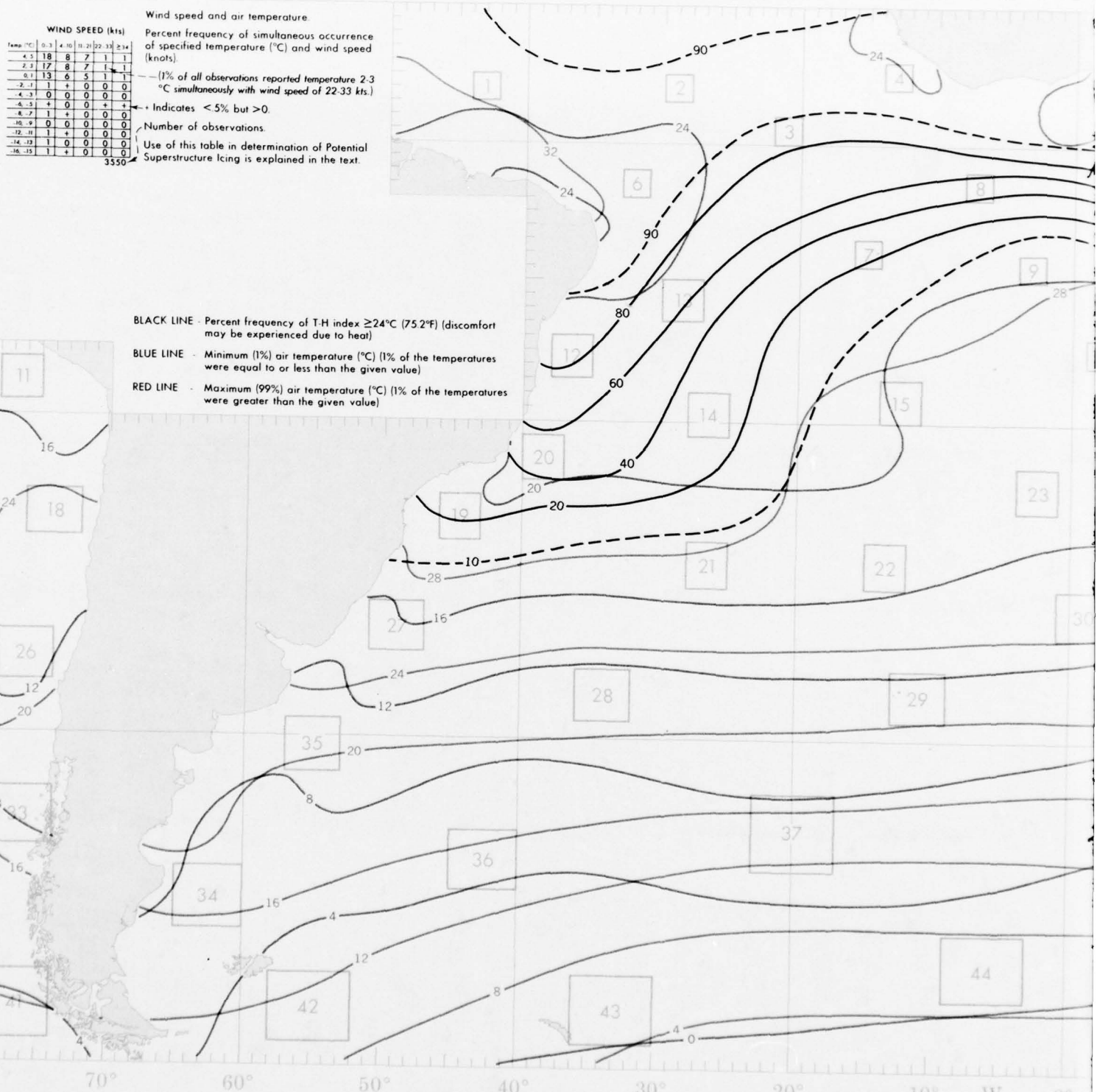
Graphs represent the objective compilation of available data for specified areas without regard to suspect
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w



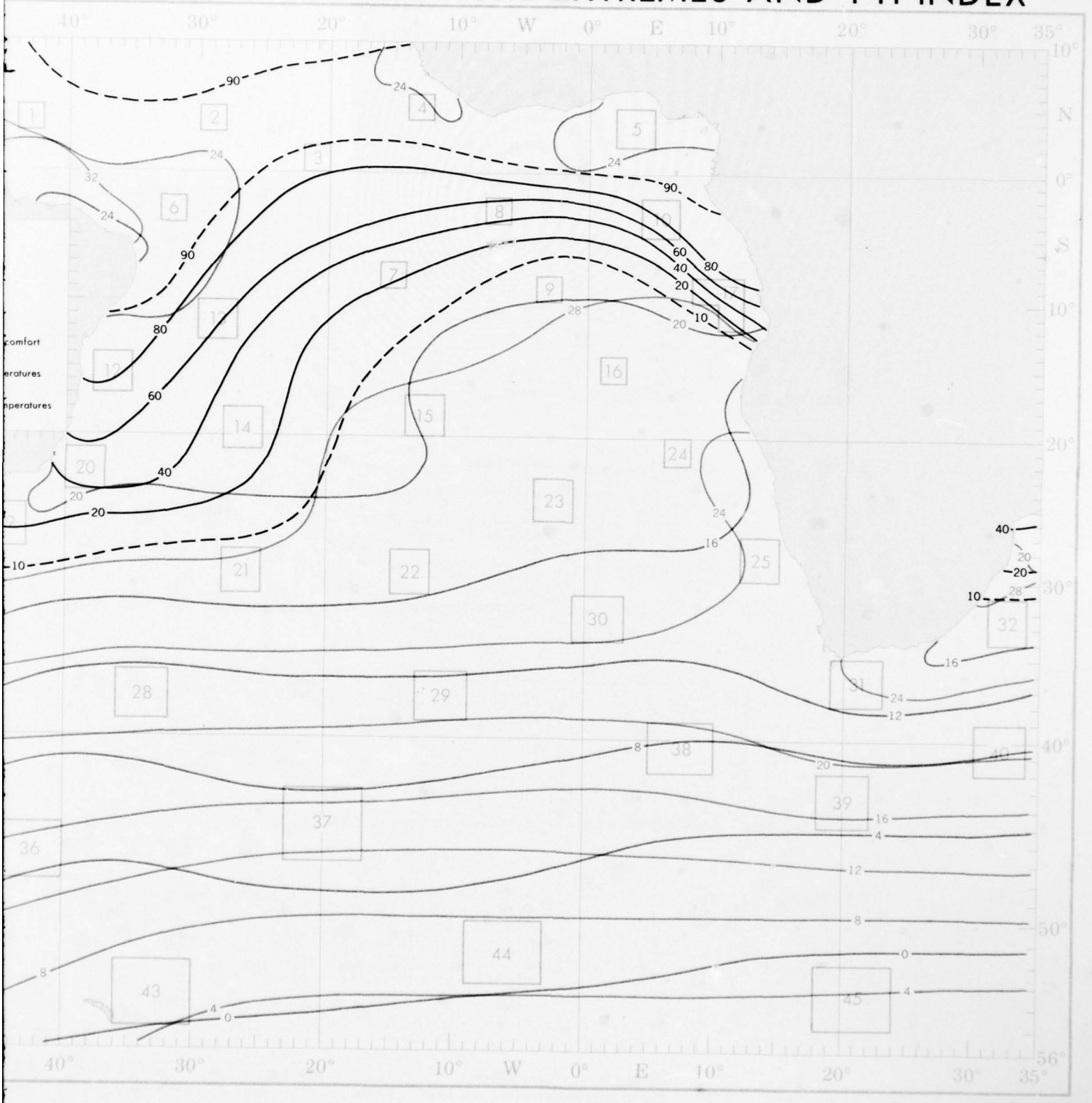
ent the objective compilation of available data for specified areas without regard to suspected biases.
nalyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER

TEMPERATURE EX



TEMPERATURE EXTREMES AND T-H INDEX



WIND SPEED AND AIR TEMPERATURE

WIND SPEED (KTS) 1

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	1	0	0
30.31	+	1	1	0	0
28.29	1	9	18	0	0
26.27	1	22	35	1	0
24.25	+	3	6	+	0
22.23	0	+	1	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

508

WIND SPEED (KTS) 2

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	+	0	0
30.31	+	+	+	0	0
28.29	2	8	4	0	0
26.27	8	42	14	+	0
24.25	4	12	4	+	0
22.23	+	1	+	+	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2150

WIND SPEED (KTS) 3

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	2	1	+	0
28.29	1	6	4	0	0
26.27	3	33	25	3	0
24.25	2	11	8	1	0
22.23	+	+	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

334

WIND SPEED (KTS) 4

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	+	0	0	0
30.31	2	1	0	0	0
28.29	14	18	2	+	0
26.27	18	34	4	+	0
24.25	1	4	1	0	0
22.23	+	1	+	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1820

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	0	0	0	0
30.31	1	2	0	0	0
28.29	11	34	3	0	0
26.27	9	31	4	0	0
24.25	0	4	+	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

335

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	+	+	0
28.29	+	6	6	+	+
26.27	+	35	44	1	0
24.25	0	3	3	+	0
22.23	+	0	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2923

WIND SPEED (KTS) 10

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	1	1	0	0
28.29	1	8	4	0	0
26.27	4	33	18	1	0
24.25	3	17	10	+	0
22.23	0	+	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

371

WIND SPEED (KTS) 11

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	0	+	0
26.27	0	1	2	0	0
24.25	1	4	1	0	0
22.23	3	8	6	0	0
20.21	4	29	16	0	0
18.19	3	11	9	+	0
16.17	0	+	1	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

221

WIND SPEED (KTS) 12

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
36.37	0	+	+	0	0
34.35	0	+	+	0	0
32.33	+	1	+	0	0
30.31	+	2	1	0	0
28.29	1	10	6	+	0
26.27	3	36	20	1	0
24.25	1	9	6	1	+
22.23	+	1	1	+	+
20.21	0	+	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0

4127

WIND SPEED (KTS) 13

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	+	+	0
30.31	+	1	1	0	0
28.29	+	3	7	1	0
26.27	+	12	35	3	0
24.25	+	9	21	2	1
22.23	+	+	2	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

459

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	+	1	0	0	0
28.29	2	4	2	+	0
26.27	3	15	6	+	0
24.25	4	25	13	1	0
22.23	3	8	10	+	0
20.21	1	+	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

570

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	0	0	0
28.29	0	+	+	0	0
26.27	0	1	3	0	0
24.25	1	9	8	0	0
22.23	2	27	23	0	0
20.21	+	10	12	1	0
18.19	0	1	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

241

WIND SPEED (KTS) 19

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	+	+	0	0
28.29	+	1	1	+	0
26.27	2	6	3	1	+
24.25	4	18	13	3	+
22.23	3	16	15	3	0
20.21	1	5	4	1	0
18.19	+	+	+	+	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

2304

WIND SPEED (KTS) 20

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	0	+	+	+	0
28.29	+	3	4	1	0
26.27	1	14	19	5	+
24.25	1	15	19	4	1
22.23	1	3	6	1	0
20.21	+	+	+	+	+
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1186

WIND SPEED (KTS) 21

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	+	+	0	+	0
26.27	+	2	1	0	0
24.25	2	8	8	1	0
22.23	4	13	16	4	1
20.21	3	14	10	3	+
18.19	1	2	5	1	+
16.17	0	+	+	+	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1111

WIND SPEED (KTS) 22

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	1	1	0	0
24.25	2	5	1	0	0
22.23	2	20	9	2	0
20.21	3	22	7	2	0
18.19	2	12	5	1	0
16.17	1	2	2	1	0
14.15	0	0	0	0	1
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

132

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	1	+	0	0	0
26.27	0	1	2	0	0
24.25	1	6	3	+	0
22.23	2	15	15	+	0
20.21	3	17	23	2	0
18.19	1	2	4	3	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

253

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	+	+	0	0
24.25	+	1	1	0	0
22.23	+	4	8	1	0
20.21	1	7	8	1	0
18.19	+	11	20	2	0
16.17	0	+	+	+	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1935

WIND SPEED (KTS) 28

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	+	0	0
20.21	1	3	1	1	0
18.19	2	9	9	4	1
16.17	2	13	15	7	1
14.15	2	6	8	5	+
12.13	+	1	4	1	+
10.11	0	1	1	+	+
8.9	0	0	+	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

708

WIND SPEED (KTS) 29

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	+	+	0	0
20.21	+	2	2	1	+
18.19	1	7	9	4	+
16.17	1	9	17	10	2
14.15	1	5	13	5	3
12.13	+	2	3	1	1
10.11	0	0	+	1	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

662

WIND SPEED (KTS) 30

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	0	0	1	0	0
24.25	0	1	0	0	0
22.23	2	4	2	1	0
20.21	3	13	5	0	0
18.19	7	23	17	2	0
16.17	1	9	7	2	0
14.15	0	0	0	1	0
12.13	0	0	1	0	1
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

184

WIND SPEED (KTS) 31

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
26.27	+	+	+	0	0
24.25	+	2	1	+	+
22.23	1	5	5	1	+
20.21	3	12	13	5	2
18.19	2	12	13	6	2
16.17	1	3	4	3	1
14.15	+	+	+	+	+
12.13	0	+	0	+	+
10.11	0	0	+	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0

2016

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	+	+	+	0
26.27	+	1	2	1	0
24.25	1	6	9	4	1
22.23	3	13	18	7	2
20.21	2	9	9	4	1
18.19	+	2	2	1	+
16.17	0	+	+	+	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1811

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	+	+	+	+	0
16.17	+	2	1	+	+
14.15	2	7	9	3	+
12.13	2	15	17	5	2
10.11	1	7	14	5	2
8.9	0	1	2	1	0
6.7	0	0	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

917

WIND SPEED (KTS) 37

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	0	7	10	0
12.13	0	3	0	10	0
10.11	0	3	3	0	3
8.9	0	7	10	28	7
6.7	0	0	3	0	0
4.5	0	0	0	3	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

29

WIND SPEED (KTS) 38

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	0	1	1	+	0
16.17	+	1	4	2	+
14.15	1	6	10	7	2
12.13	2	10	16	7	4
10.11	1	4	8	7	4
8.9	+	1	2	2	1
6.7	0	0	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

765

WIND SPEED (KTS) 39

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	0	1	1	1	+
16.17	0	+	2	1	+
14.15	+	3	5	5	3
12.13	1	4	7	8	4
10.11	1	6	10	9	3
8.9	1	3	8	6	3
6.7	0	1	1	2	1
4.5	0	1	0	+	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

585

WIND SPEED (KTS) 40

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
24.25	0	0	+	0	0
22.23	0	+	1	+	0
20.21	+	1	2	+	+
18.19	+	4	6	3	1
16.17	1	6	9	5	2
14.15	1	5	10	6	2
12.13	1	5	6	5	3
10.11	+	2	3	4	1
8.9	+	+	1	1	1
6.7	+	+	+	+	+
4.5	0	0	0	0	0

880

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	+	0	0
12.13	+	1	+	0	0
10.11	1	3	3	4	1
8.9	1	6	15	12	6
6.7	2	5	12	10	6
4.5	1	2	5	3	1
2.3	0	+	0	+	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

773

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	+	+	+	+	0
10.11	+	2	2	+	0
8.9	1	10	12	4	2
6.7	2	14	18	8	1
4.5	2	5	6	5	2
2.3	0	1	1	1	+
0.1	0	0	0	0	0
-2.-1	0	0	0	+	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

942

Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bi

EMPERATURE

DECEMBER

3

WIND SPEED (KTS) 4

≥ 34	TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0	32.33	+	+	0	0	0
0	30.31	2	1	0	0	0
0	28.29	14	18	2	+	0
0	26.27	18	34	4	+	0
0	24.25	1	4	1	0	0
0	22.23	+	1	+	0	0
0	20.21	0	0	0	0	0
0	18.19	0	0	0	0	0
0	16.17	0	0	0	0	0
0	14.15	0	0	0	0	0
0	12.13	0	0	0	0	0

334 1820

WIND SPEED (KTS) 5

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	+	0	0	0	0
30.31	1	2	0	0	0
28.29	11	34	3	0	0
26.27	9	31	4	0	0
24.25	0	4	+	0	0
22.23	0	0	0	0	0
20.21	0	0	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

335

WIND SPEED (KTS) 6

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	+	+	0	0
28.29	+	6	6	+	+
26.27	+	35	44	1	0
24.25	0	3	3	+	0
22.23	+	0	+	0	0
20.21	0	0	+	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

2923

WIND SPEED (KTS) 7

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
34.35	0	0	+	0	0
32.33	0	+	0	0	0
30.31	+	1	+	0	0
28.29	+	+	1	0	0
26.27	0	5	12	1	0
24.25	0	14	47	2	0
22.23	0	4	11	1	0
20.21	0	0	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0

654

WIND SPEED (KTS) 8

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	+	0	0
30.31	+	1	+	0	0
28.29	+	3	3	+	0
26.27	+	17	16	+	0
24.25	1	27	28	+	0
22.23	+	1	1	+	0
20.21	+	+	+	+	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1843

WIND SPEED (KTS) 9

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	+	0	0	0
30.31	+	+	0	0	0
28.29	+	1	+	0	0
26.27	1	3	2	0	0
24.25	1	19	11	0	0
22.23	1	36	21	+	0
20.21	+	2	2	0	0
18.19	+	0	0	0	0
16.17	0	0	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

1679

2

WIND SPEED (KTS) 13

≥ 34	TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0	34.35	0	0	+	0	0
0	32.33	0	+	+	0	0
0	30.31	+	1	1	0	0
0	28.29	+	3	7	1	0
0	26.27	+	12	35	3	0
0	24.25	+	9	21	2	1
+	22.23	+	+	2	0	0
+	20.21	0	0	0	0	0
0	18.19	0	0	0	0	0
0	16.17	0	0	0	0	0
0	14.15	0	0	0	0	0

4127 459

WIND SPEED (KTS) 14

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	1	0	0	0
30.31	+	1	0	0	0
28.29	2	4	2	+	0
26.27	3	15	6	+	0
24.25	4	25	13	1	0
22.23	3	8	10	+	0
20.21	1	+	1	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

570

WIND SPEED (KTS) 15

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
32.33	0	0	+	0	0
30.31	0	0	0	0	0
28.29	0	+	+	0	0
26.27	0	1	3	0	0
24.25	1	9	8	0	0
22.23	2	27	23	0	0
20.21	+	10	12	1	0
18.19	0	1	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0

241

WIND SPEED (KTS) 16

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	+	0	0	0
26.27	+	1	+	0	0
24.25	+	4	2	0	0
22.23	1	16	13	1	0
20.21	1	27	24	+	0
18.19	+	3	5	+	0
16.17	0	+	+	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1886

WIND SPEED (KTS) 17

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	1	+	0	0	0
28.29	1	5	+	0	0
26.27	4	22	2	0	0
24.25	8	41	8	0	0
22.23	+	5	1	0	0
20.21	0	1	0	0	0
18.19	0	0	0	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

285

WIND SPEED (KTS) 18

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	0	0	0
26.27	0	0	0	0	0
24.25	1	+	+	0	0
22.23	1	3	2	0	0
20.21	4	8	7	1	0
18.19	5	14	13	1	+
16.17	3	1[illegible]	15	1	0
14.15	+	+	2	1	0
12.13	0	+	+	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

572

1

WIND SPEED (KTS) 22

≥ 34	TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0	26.27	0	1	1	0	0
0	24.25	2	5	1	0	0
0	22.23	2	20	9	2	0
0	20.21	3	22	7	2	0
1	18.19	2	12	5	1	0
+	16.17	1	2	2	1	0
+	14.15	0	0	0	0	1
0	12.13	0	0	0	0	0
0	10.11	0	0	0	0	0
0	8.9	0	0	0	0	0
0	6.7	0	0	0	0	0

111 132

WIND SPEED (KTS) 23

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	+	0	0	0	0
28.29	1	+	0	0	0
26.27	0	1	2	0	0
24.25	1	6	3	+	0
22.23	2	15	15	+	0
20.21	3	17	23	2	0
18.19	1	2	4	0	0
16.17	0	0	0	0	0
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

253

WIND SPEED (KTS) 24

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	0	0	+	0	0
26.27	+	+	+	0	0
24.25	+	1	1	0	0
22.23	+	4	8	1	0
20.21	1	17	29	2	0
18.19	+	11	20	2	0
16.17	0	+	+	0	0
14.15	0	+	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

1935

WIND SPEED (KTS) 25

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
28.29	+	0	0	+	0
26.27	+	+	+	+	0
24.25	+	+	+	+	0
22.23	+	2	2	+	0
20.21	1	8	12	4	+
18.19	2	14	30	12	1
16.17	+	2	6	3	+
14.15	0	0	+	+	+
12.13	0	0	0	0	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0

3329

WIND SPEED (KTS) 26

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	1	0	+	0
20.21	+	2	2	+	0
18.19	1	13	7	3	0
16.17	2	19	19	5	0
14.15	2	7	7	6	0
12.13	0	1	1	1	0
10.11	0	0	0	0	0
8.9	0	0	0	0	0
6.7	0	0	0	0	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

284

WIND SPEED (KTS) 27

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	+	+	0	0
28.29	0	+	0	0	0
26.27	+	1	1	+	0
24.25	1	3	3	1	+
22.23	2	9	13	3	1
20.21	2	12	15	5	1
18.19	1	6	8	4	2
16.17	+	1	2	1	+
14.15	+	+	+	+	+
12.13	0	0	0	+	0
10.11	0	0	+	0	0

1534

0

WIND SPEED (KTS) 31

≥ 34	TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0	26.27	+	+	+	0	0
0	24.25	+	2	1	+	+
0	22.23	1	5	5	1	+
0	20.21	3	12	13	5	2
0	18.19	2	12	13	6	2
0	16.17	1	3	4	3	1
0	14.15	+	+	+	+	+
1	12.13	0	+	0	+	+
0	10.11	0	0	+	0	0
0	8.9	0	0	0	0	0
0	6.7	0	0	0	0	0

184 2016

WIND SPEED (KTS) 32

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
30.31	0	0	+	0	0
28.29	+	+	+	+	0
26.27	+	1	2	1	0
24.25	1	6	9	4	1
22.23	3	13	18	7	2
20.21	2	9	9	4	1
18.19	+	2	2	1	+
16.17	0	+	+	+	+
14.15	0	0	0	0	0
12.13	0	0	0	0	0
10.11	0	0	0	0	0

1811

WIND SPEED (KTS) 33

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	0	+	0	0
18.19	+	+	+	+	0
16.17	+	2	1	+	+
14.15	2	7	9	3	+
12.13	2	15	17	5	2
10.11	1	7	14	5	2
8.9	0	1	2	1	0
6.7	0	0	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

917

WIND SPEED (KTS) 34

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
20.21	0	+	0	0	0
18.19	0	+	+	0	0
16.17	+	2	1	1	0
14.15	1	4	5	1	+
12.13	2	9	12	4	1
10.11	2	14	12	4	3
8.9	1	5	4	3	3
6.7	+	1	1	1	2
4.5	0	0	+	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0

975

WIND SPEED (KTS) 35

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
22.23	0	0	+	0	0
20.21	+	2	+	+	0
18.19	1	5	3	1	0
16.17	2	5	6	2	1
14.15	3	9	10	3	1
12.13	3	10	9	3	1
10.11	4	5	5	3	1
8.9	+	+	1	+	0
6.7	0	+	+	+	0
4.5	0	0	0	0	0
2.3	0	0	0	0	0

569

WIND SPEED (KTS) 36

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
16.17	+	+	+	0	0
14.15	0	1	2	1	0
12.13	1	6	7	6	+
10.11	1	10	17	12	4
8.9	+	4	11	4	5
6.7	+	1	3	2	2
4.5	0	0	1	0	0
2.3	0	0	0	0	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0

514

8

WIND SPEED (KTS) 40

≥ 34	TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
0	24.25	0	0	+	0	0
+	22.23	0	+	1	+	0
+	20.21	+	1	2	+	+
3	18.19	+	4	6	3	1
4	16.17	1	6	9	5	2
3	14.15	1	5	10	6	2
3	12.13	1	5	6	5	3
1	10.11	+	2	3	4	1
0	8.9	+	+	1	1	1
0	6.7	+	+	+	+	+
0	4.5	0	0	0	0	0

85 880

WIND SPEED (KTS) 41

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
14.15	0	+	+	0	0
12.13	+	1	+	0	0
10.11	1	3	3	4	1
8.9	1	6	15	12	6
6.7	2	5	12	10	6
4.5	1	2	5	3	1
2.3	0	+	0	+	0
0.1	0	0	0	0	0
-2.-1	0	0	0	0	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0

773

WIND SPEED (KTS) 42

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
12.13	+	+	+	+	0
10.11	+	2	2	+	0
8.9	1	10	12	4	2
6.7	2	14	18	8	1
4.5	2	5	6	5	2
2.3	0	1	1	1	+
0.1	0	0	0	0	0
-2.-1	0	0	0	+	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0

942

WIND SPEED (KTS) 43

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	0	0	1	0	0
6.7	0	0	1	0	0
4.5	0	3	3	1	0
2.3	3	18	16	5	+
0.1	3	20	12	7	2
-2.-1	0	+	+	1	1
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

223

WIND SPEED (KTS) 44

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
4.5	0	1	7	8	1
2.3	0	3	16	25	8
0.1	0	0	7	10	13
-2.-1	0	0	0	1	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0
-14.-13	0	0	0	0	0
-16.-15	0	0	0	0	0

134

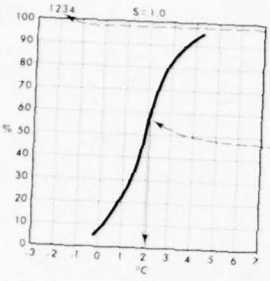
WIND SPEED (KTS) 45

TEMP (°C)	0-3	4-10	11-21	22-33	≥ 34
8.9	1	1	0	0	0
6.7	0	0	0	0	0
4.5	1	1	2	0	0
2.3	3	2	10	2	0
0.1	3	19	25	10	1
-2.-1	2	8	5	5	0
-4.-3	0	0	0	0	0
-6.-5	0	0	0	0	0
-8.-7	0	0	0	0	0
-10.-9	0	0	0	0	0
-12.-11	0	0	0	0	0

122

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Sea surface temperature

Number of observations

Cumulative percent frequency of sea surface temperatures equal to or less than the temperature intersected by the curve.

60% of all observed sea surface temperatures were ≤2.1°C or ≤35.8°F.)

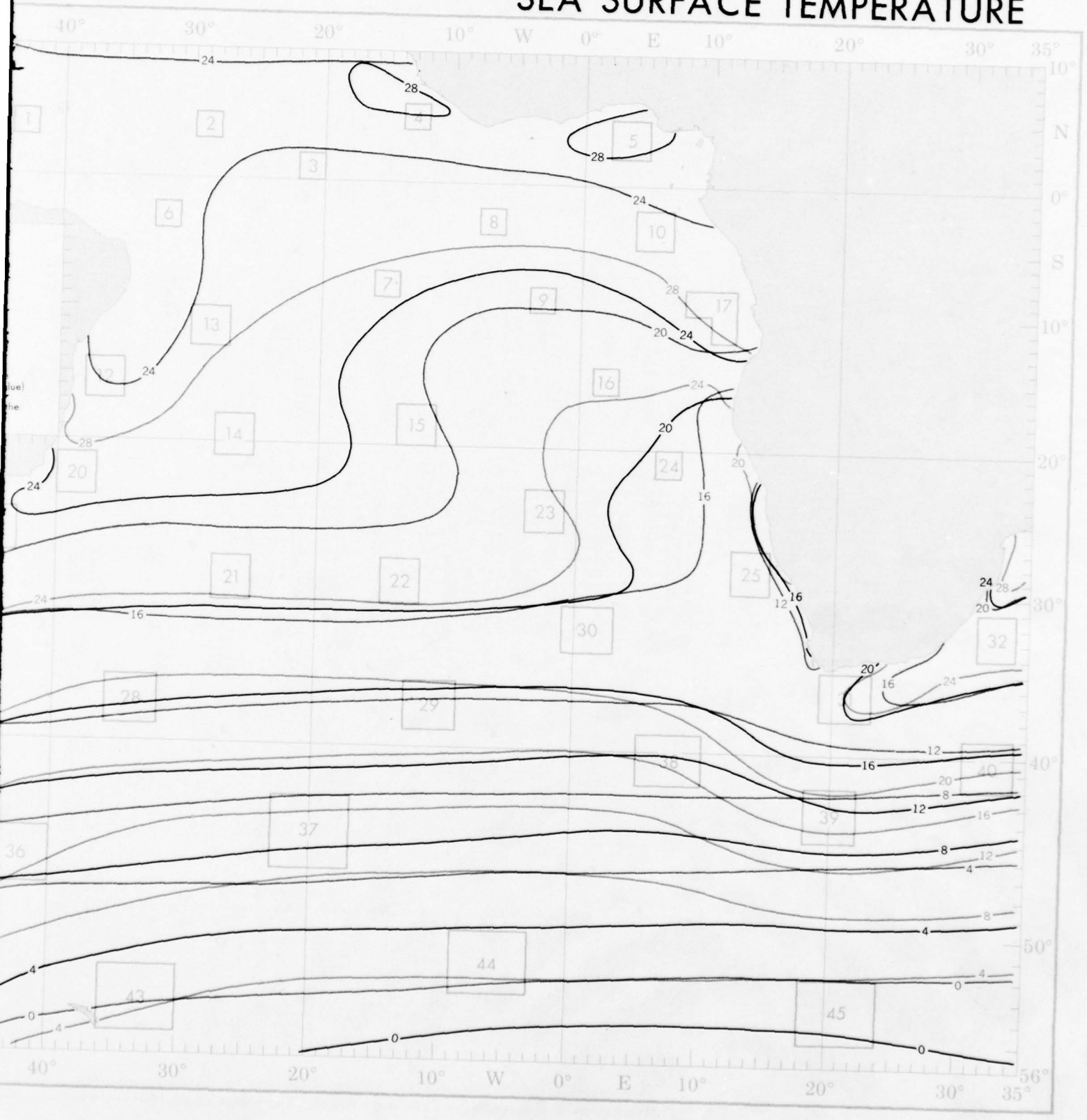
S - Standard deviation of sea surface temperatures (°C).

BLACK LINE - Mean sea surface temperature (°C)

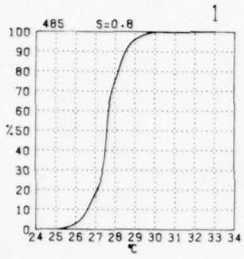
BLUE LINE - Minimum (1%) sea surface temperature (°C) (1% of the temperatures were equal to or less than the given value)

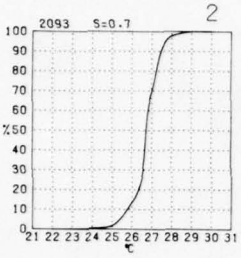
RED LINE - Maximum (99%) sea surface temperature (°C) (1% of the temperatures were greater than the given value)

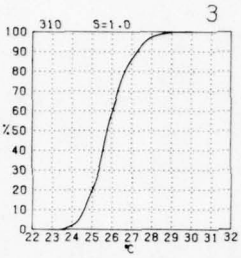
SEA SURFACE TEMPERATURE

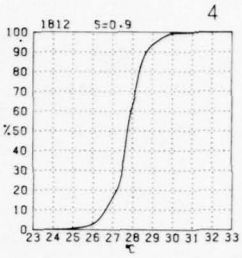


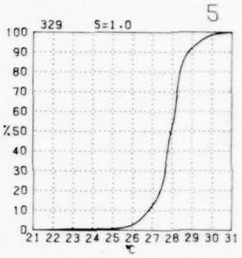
SEA SURFACE TEMPERATURE

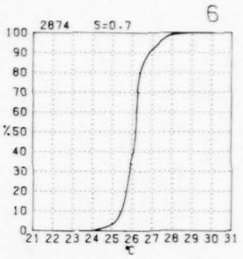


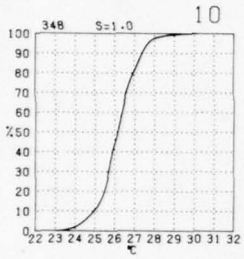


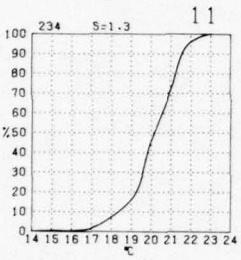


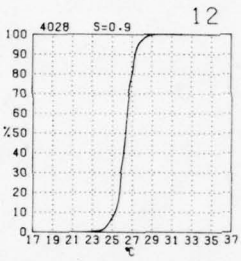


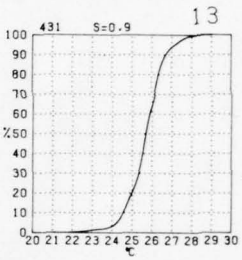


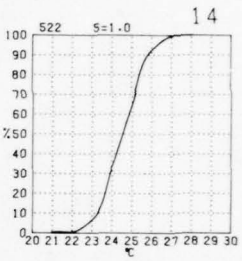


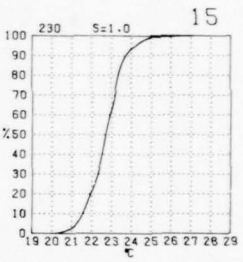


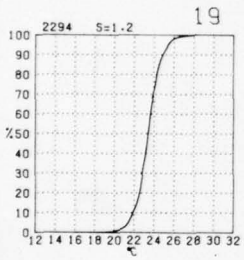


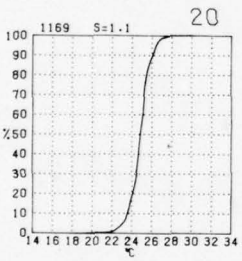


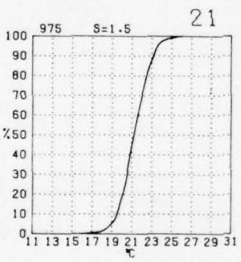


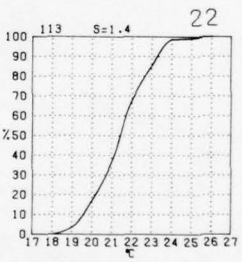


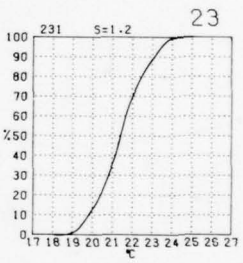


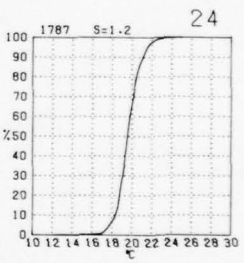


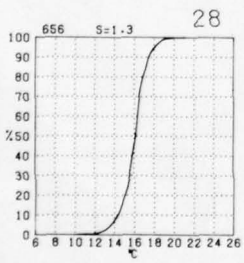


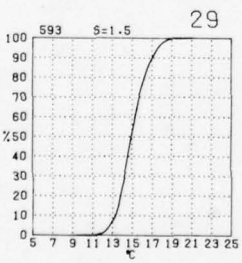


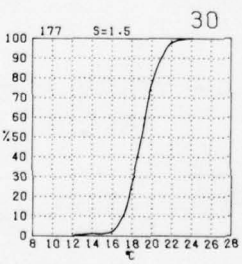


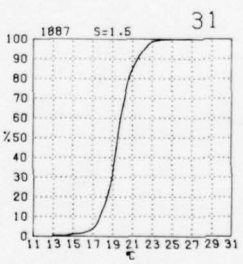


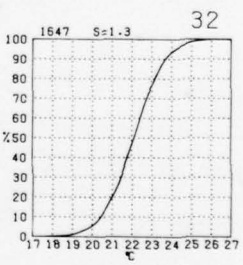


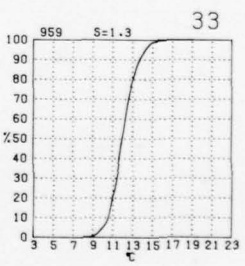


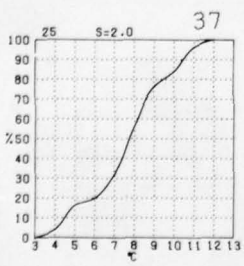


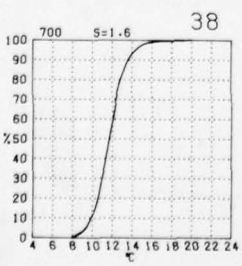


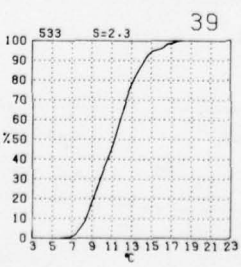


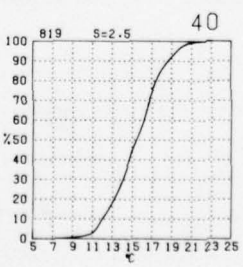


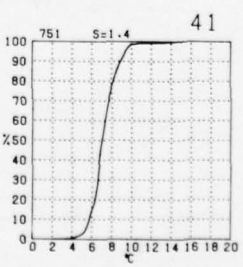


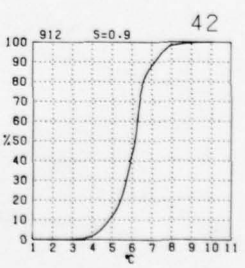




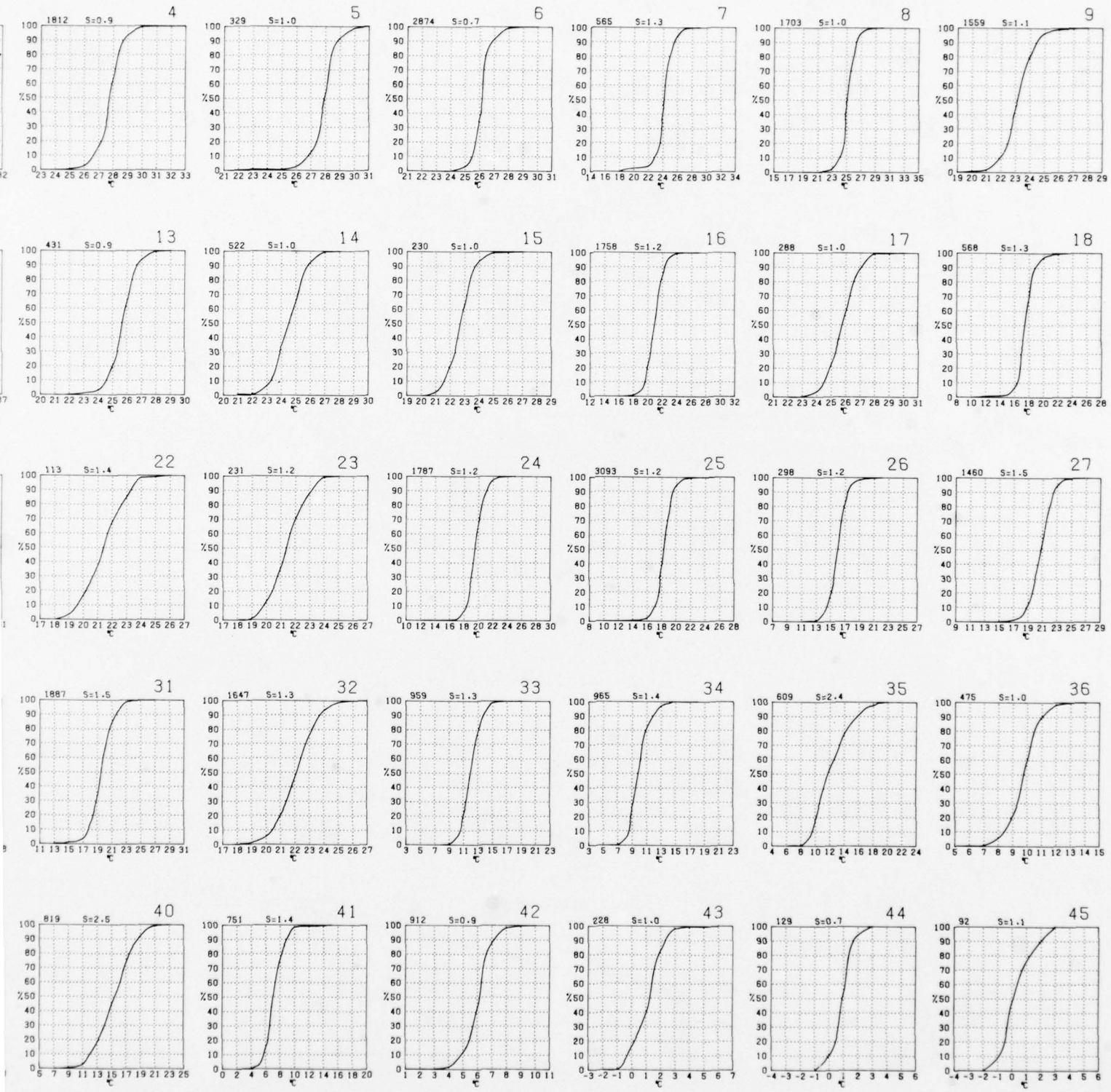






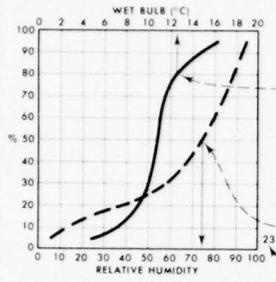


Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bio



the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Wet bulb - Relative humidity.

Cumulative percent frequency of wet-bulb temperatures equal to or less than the temperature intersected by the curve (top scale).

Wet bulb (°C).

(*80% of all observed wet-bulb temperatures were ≤12.5°C or 54.5°F.*)

Cumulative percent frequency of relative humidities equal to or less than the humidity intersected by the curve (bottom scale).

Relative humidity (%).

(*50% of all observed relative humidities were ≤74%.*)

Number of observations.

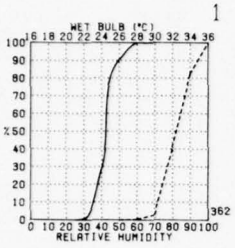
BLUE LINE - Minimum (1%) dew-point temperature (°C) (1% of the computed values were equal to or less than the given value)

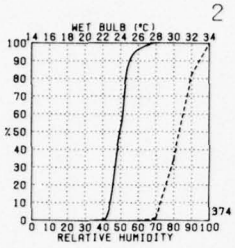
RED LINE - Maximum (99%) dew-point temperature (°C) (1% of the computed values were greater than the given value)

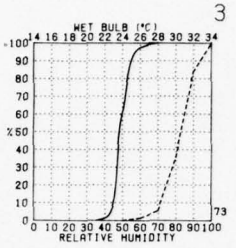
HUMIDITY

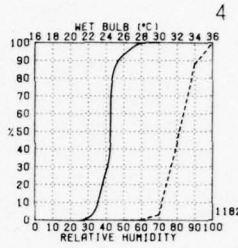

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
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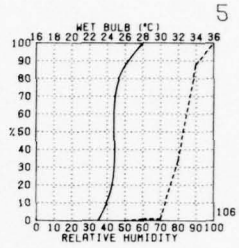
WET BULB AND RELATIVE HUMIDITY

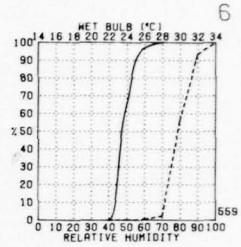


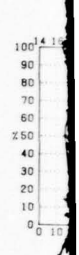


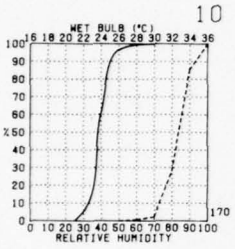


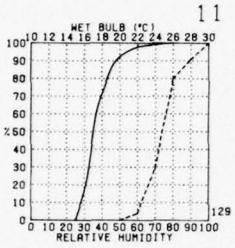


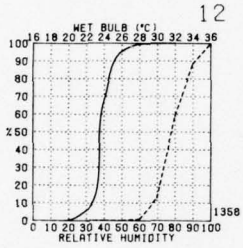


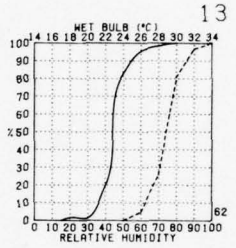


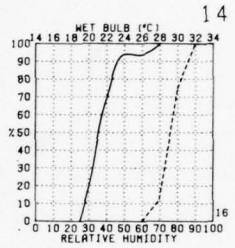


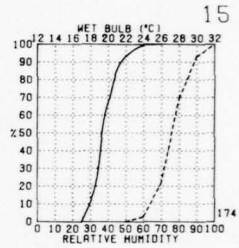


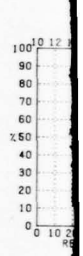


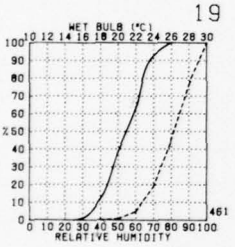


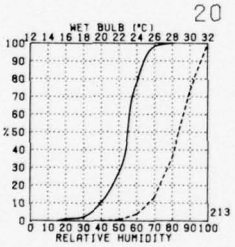


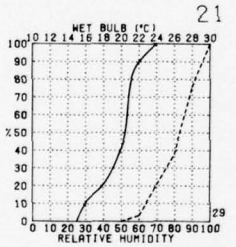


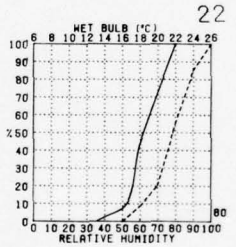


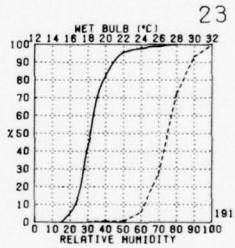


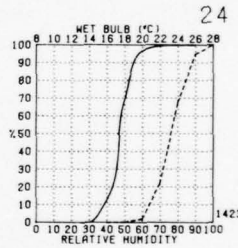


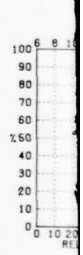


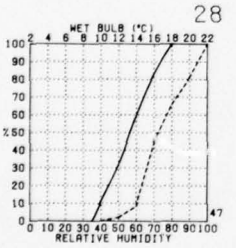


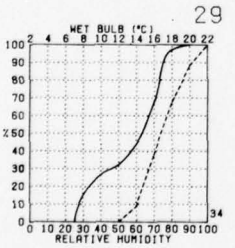


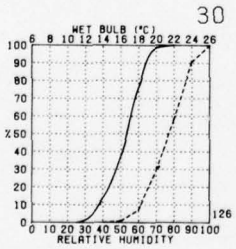


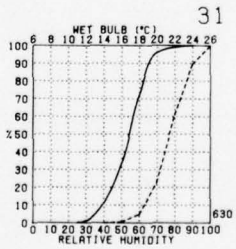


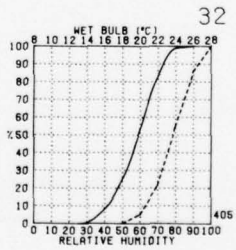


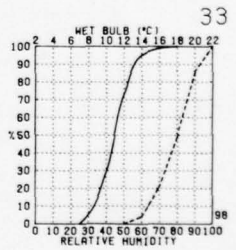


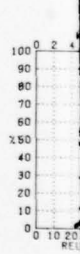


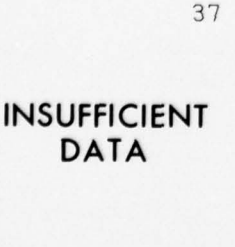




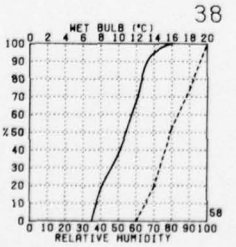


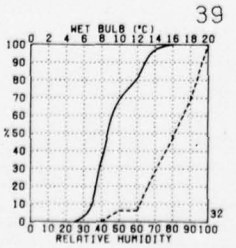


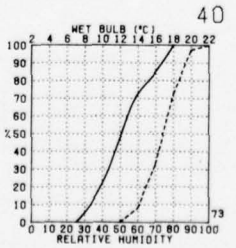


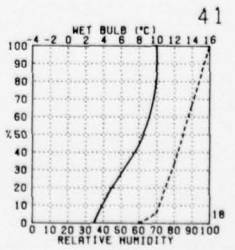


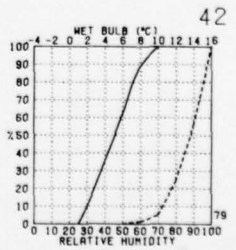
INSUFFICIENT DATA

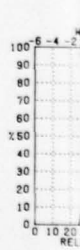








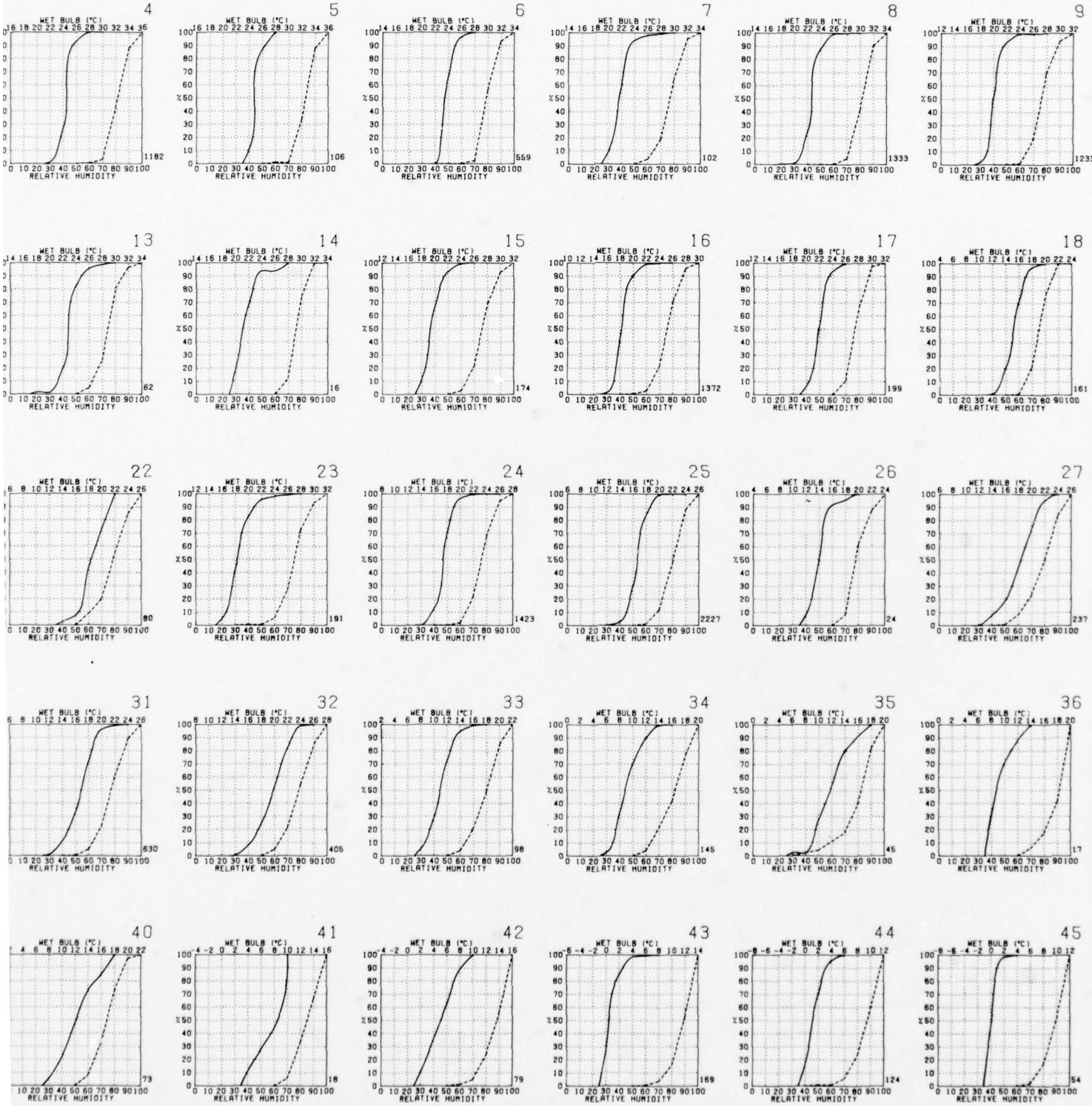




Graphs represent the objective compilation of available data for specified areas without regard to suspect
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bias w

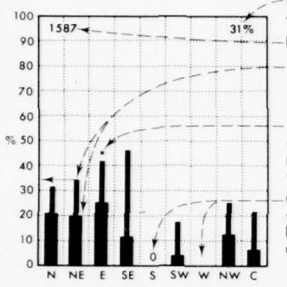
HUMIDITY

DECEMBER



objective compilation of available data for specified areas without regard to suspected biases.
opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Percent frequency of surface wind observations from each direction and calm that were accompanied by precipitation, subdivided into liquid type (including freezing rain and freezing drizzle) and snow.

Percentage of present weather observations reporting precipitation.

Number of observations.

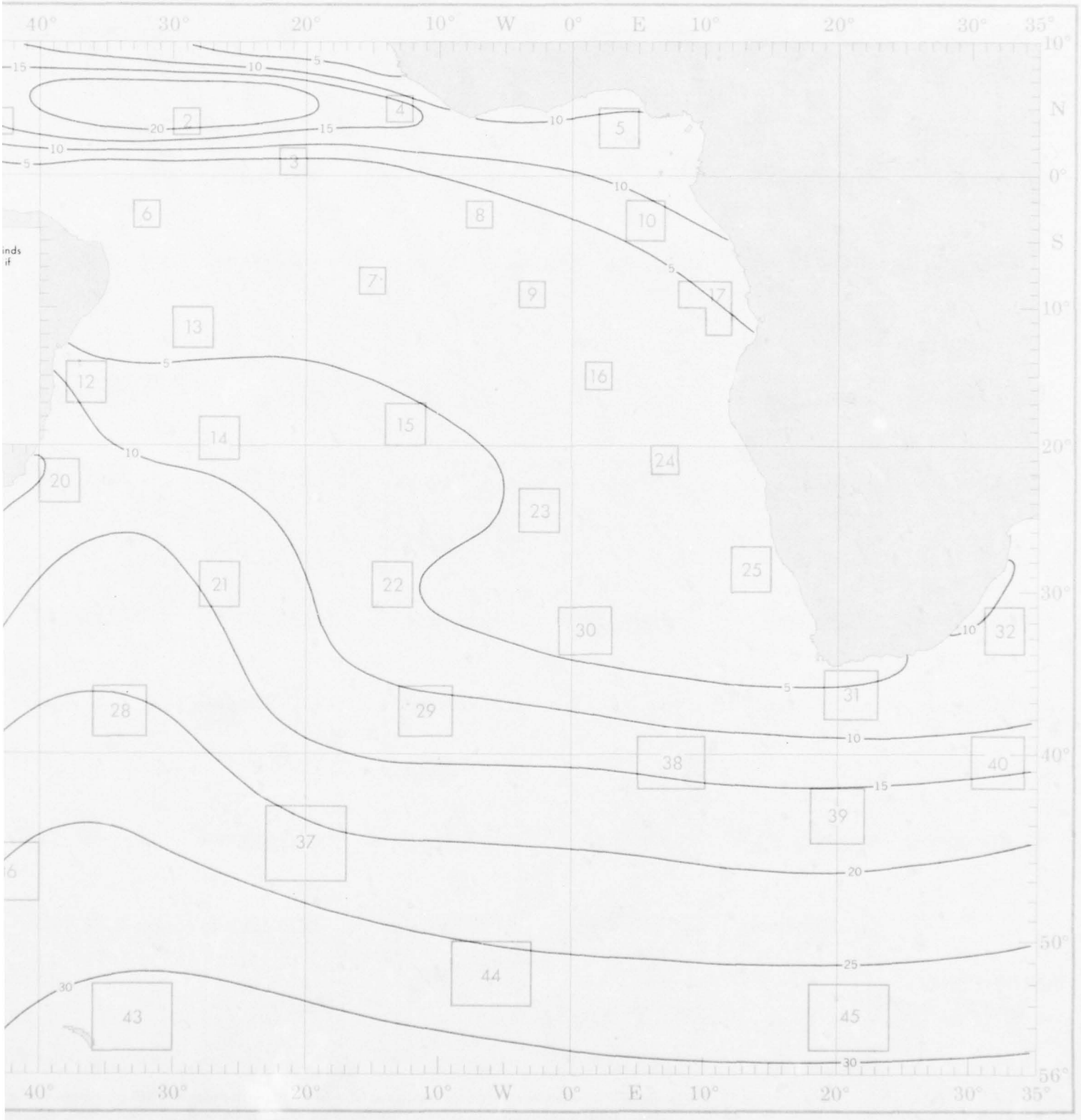
(*34% of all NE winds were accompanied by precipitation, of which 14% was liquid and 20% was snow.*)

An asterisk in the column for a given direction or calm indicates that the percentage was based on 10-30 observations of present weather and wind direction.

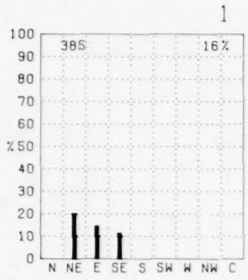
0 replaces bar when no precipitation was observed with winds from a given direction or calm. No bar graph is presented if less than 10 observations containing present weather were reported for a given direction or calm.

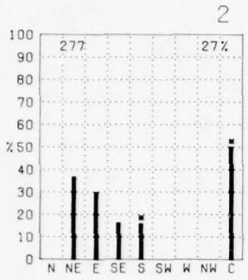
RED LINE - Percent frequency of observations reporting precipitation

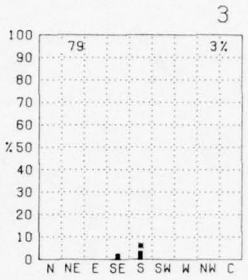
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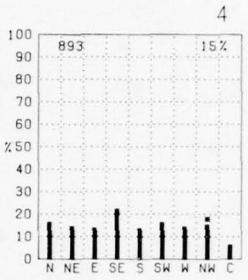


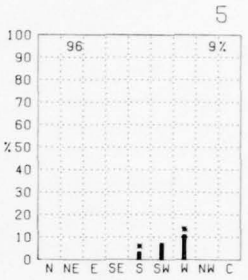
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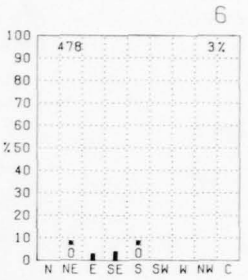


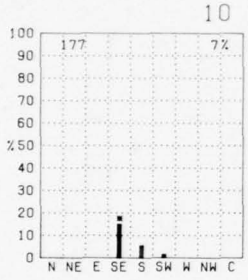


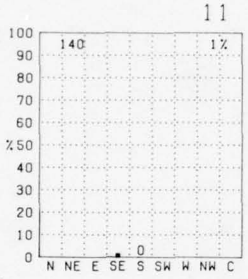


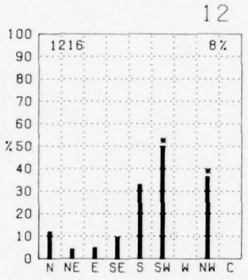


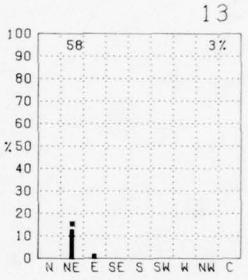






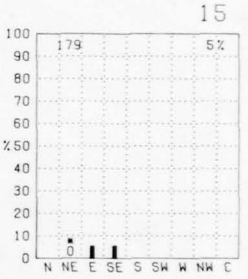


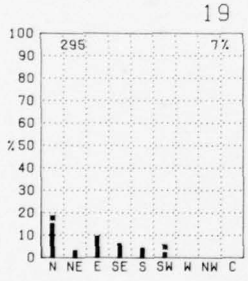


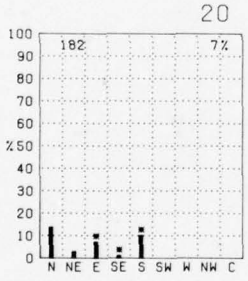


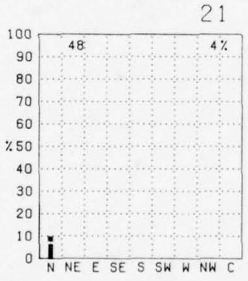
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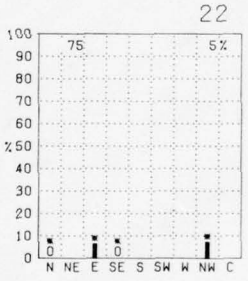
INSUFFICIENT DATA

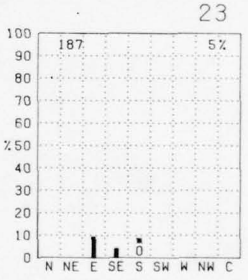


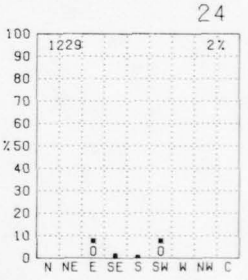


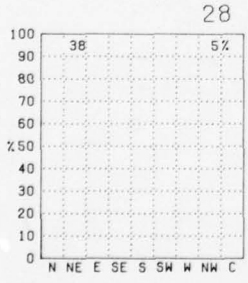


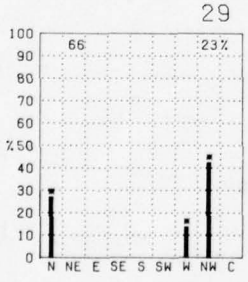


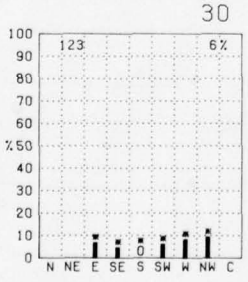


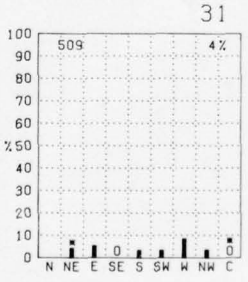


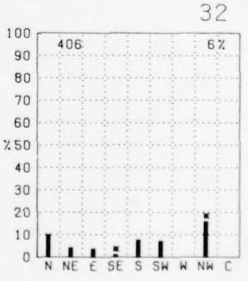


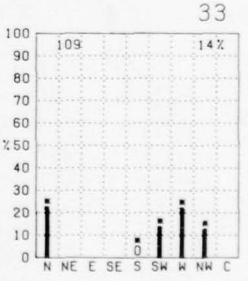






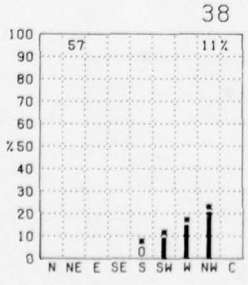


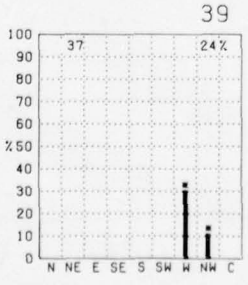


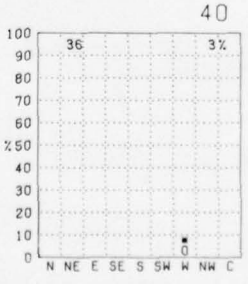


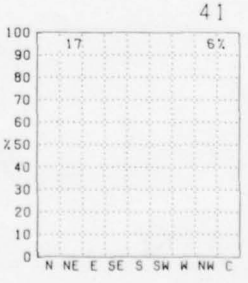
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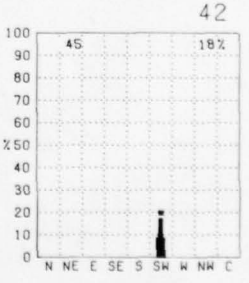
INSUFFICIENT DATA









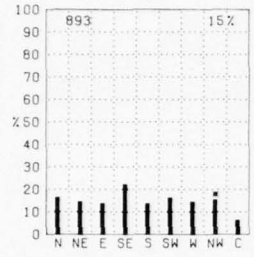


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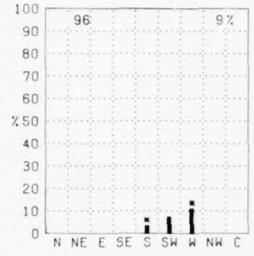
DECEMBER



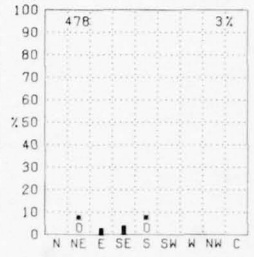
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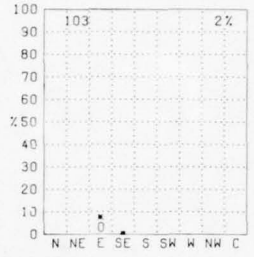
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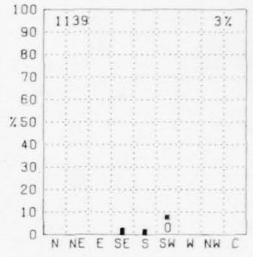
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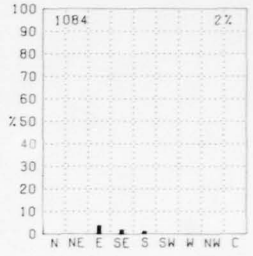
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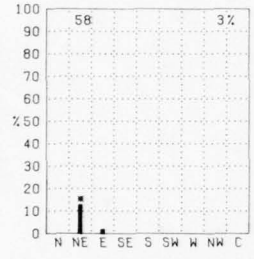
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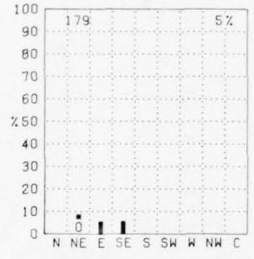
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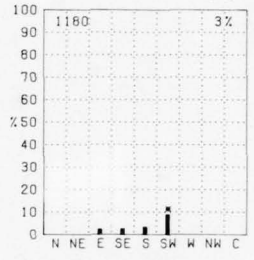
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INSUFFICIENT DATA

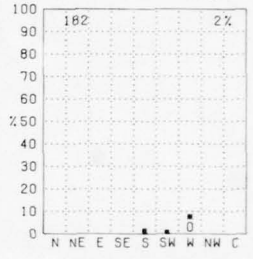
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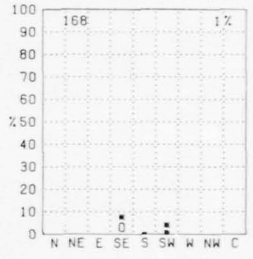
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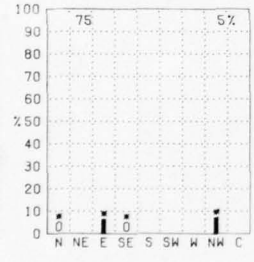
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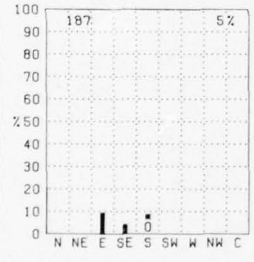
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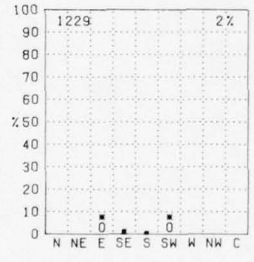
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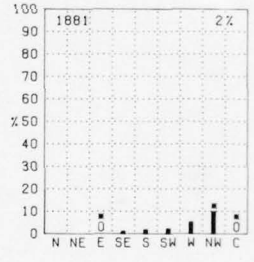
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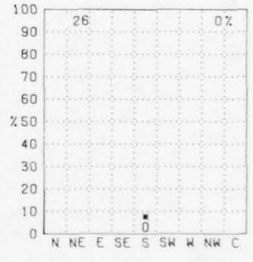
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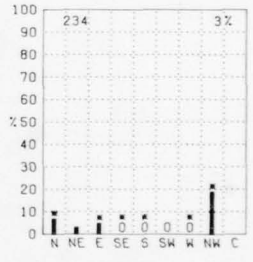
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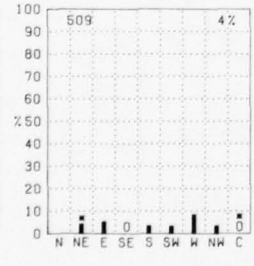
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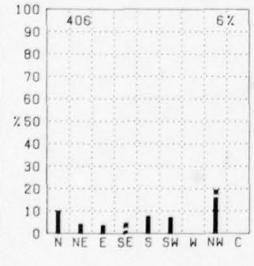
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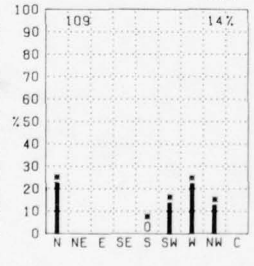
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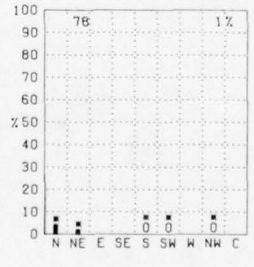
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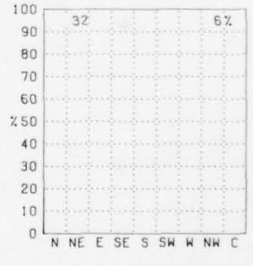
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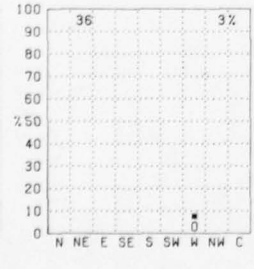
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INSUFFICIENT DATA

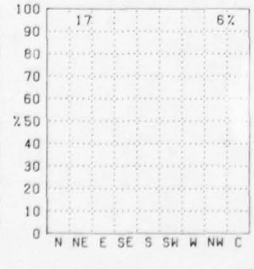
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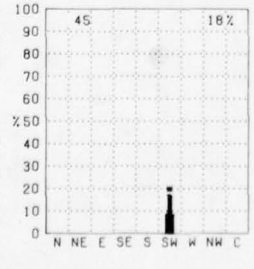
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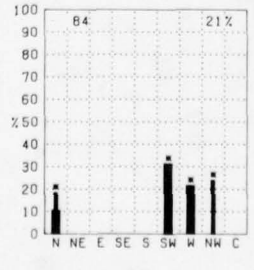
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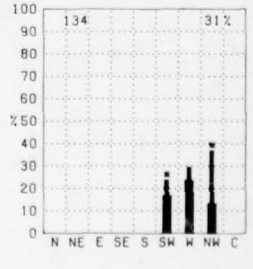
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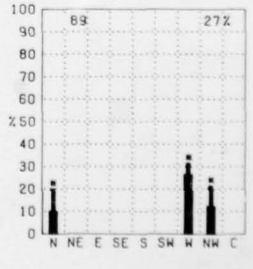
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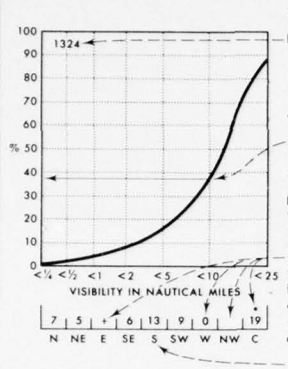


45



ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Visibility.

Number of observations.

Cumulative percent frequency of visibilities less than the visibility intersected by the curve.

(37% of *all visibilities reported were <10 nautical miles.*)

The table below the graph indicates percent frequency of occurrence of visibility <2 nautical miles versus wind direction.

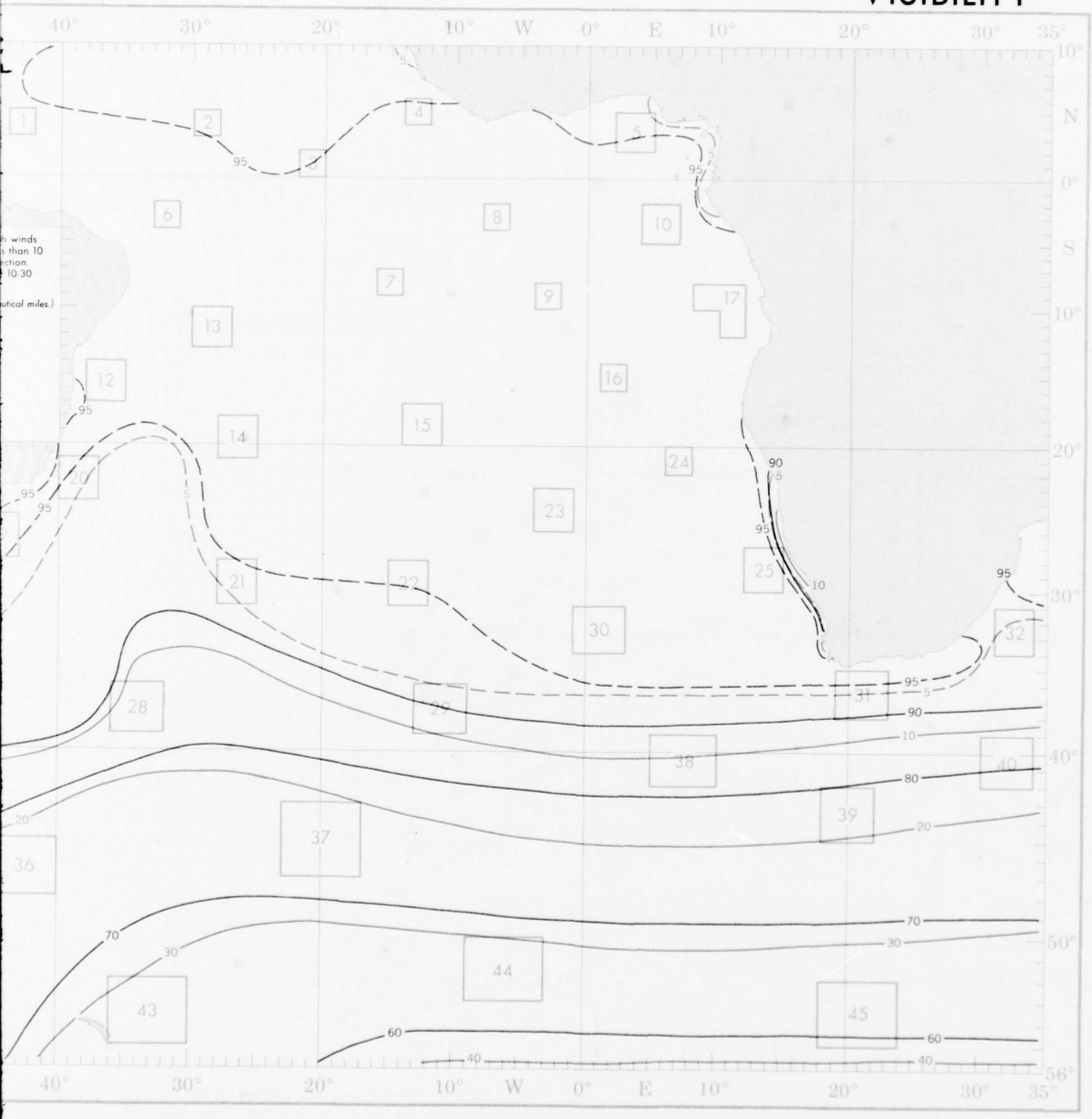
+ indicates <.5% but >0. 0 indicates that no visibilities <2 nautical miles were observed with winds from a direction or calm. No percentage is given if less than 10 observations were available for visibility and wind direction. An asterisk indicates that the percentage was based on 10-30 observations of visibility and wind direction.

(13% of *all S winds were accompanied by visibilities <2 nautical miles.*)

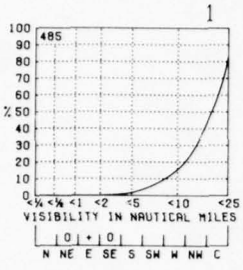
BLUE LINE - Percent frequency of visibilities ≥5 nautical miles

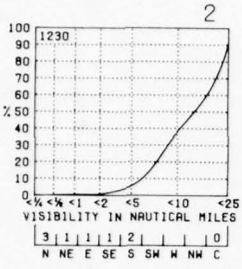
RED LINE - Percent frequency of visibilities <2 nautical miles

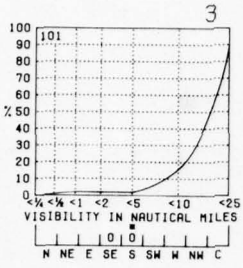
VISIBILITY

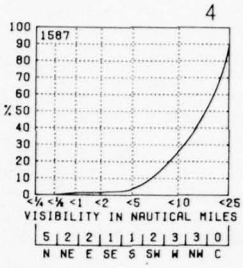

40° 30° 20° 10° W 0° E 10° 20° 30° 35°
10° N 0° S 10° 20° 30° 40° 50° 56°
1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 20 21 22 23 24 25 28 29 30 31 32 36 37 38 39 40 43 44 45
95 5 90 10 80 20 70 30 60 40
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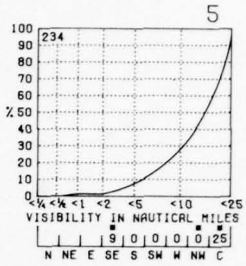
VISIBILITY

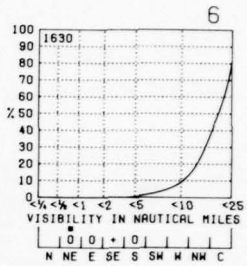


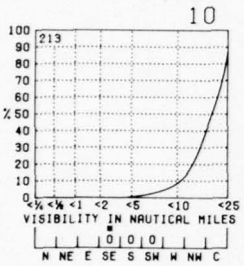


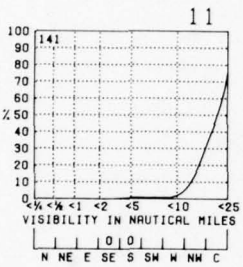


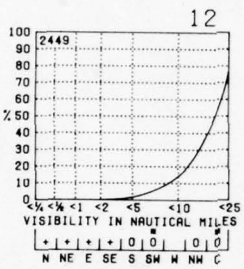


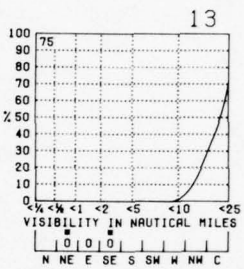


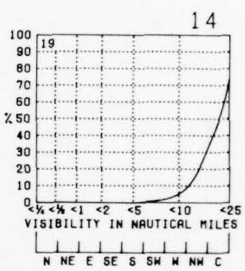


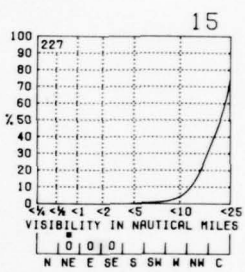


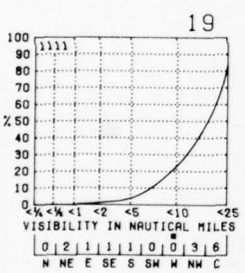


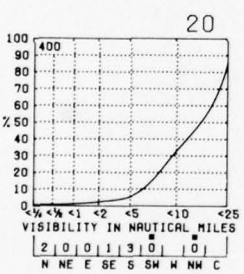


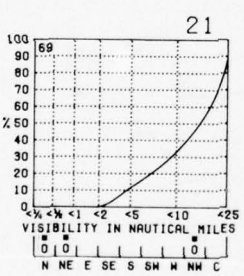


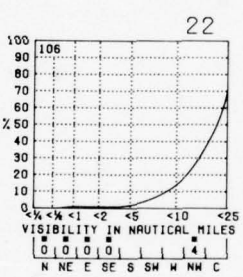


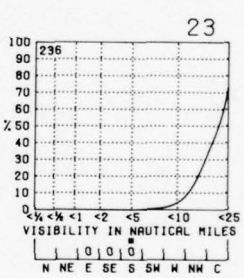


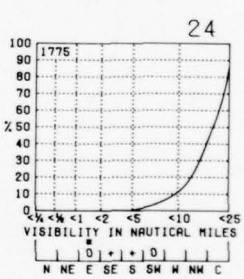


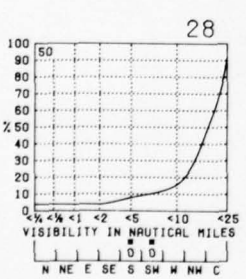


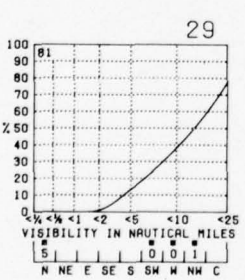


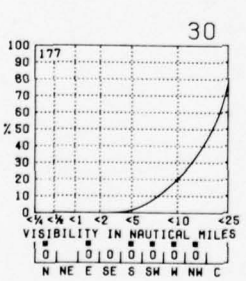


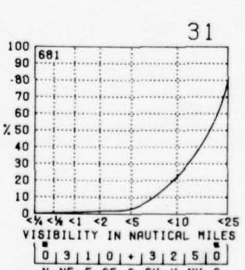


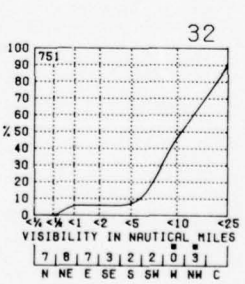


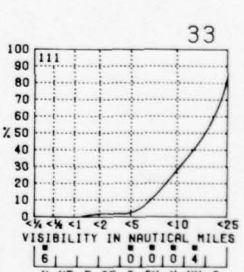






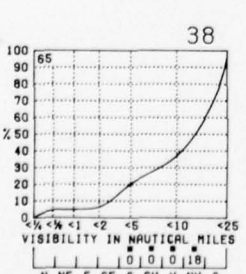


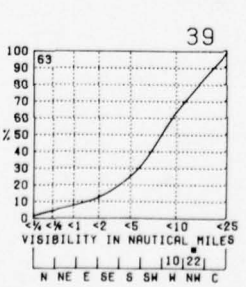


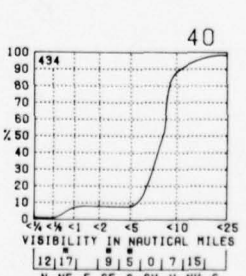


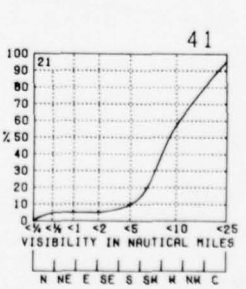
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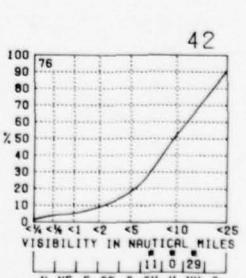
INSUFFICIENT DATA





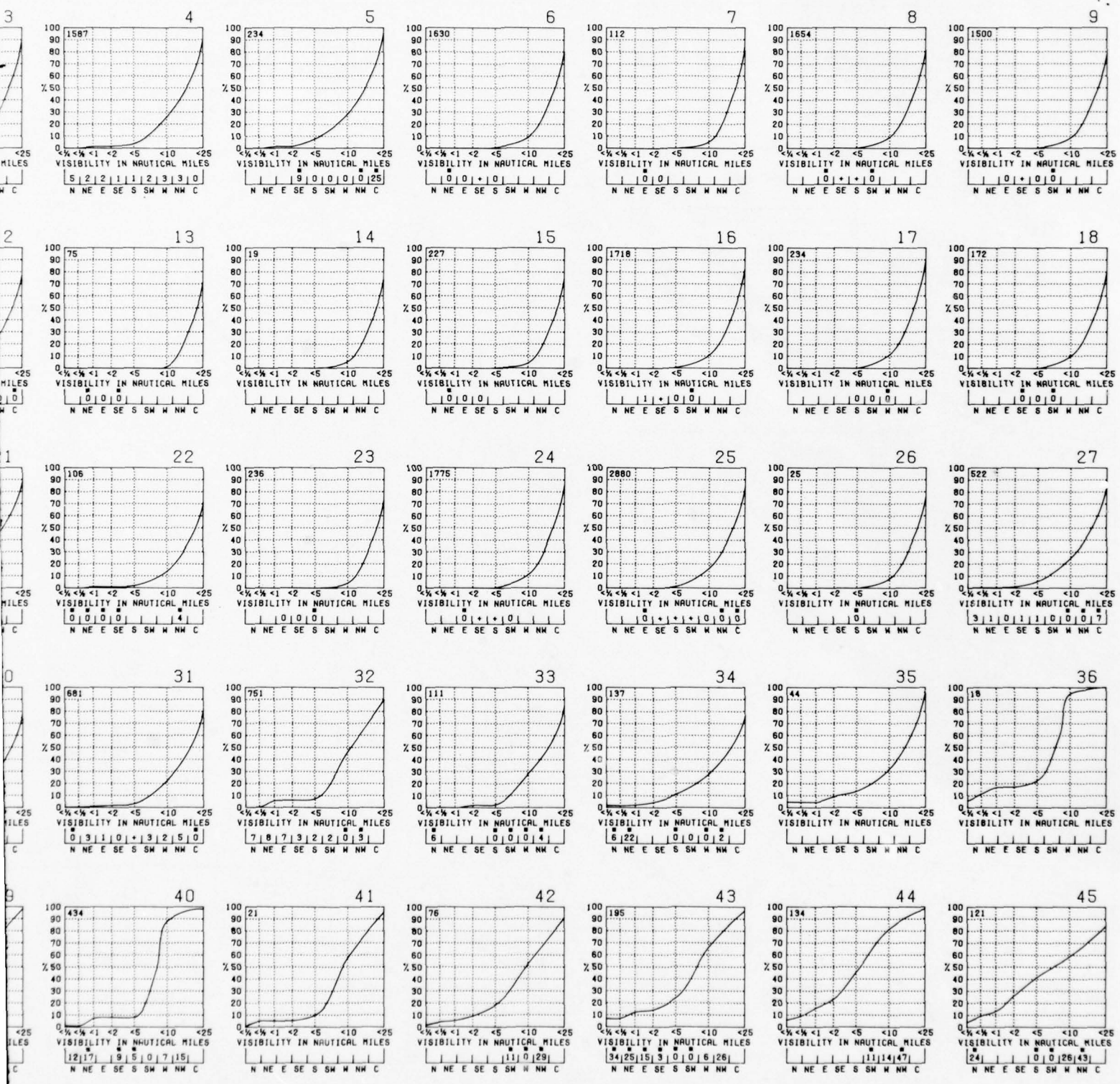






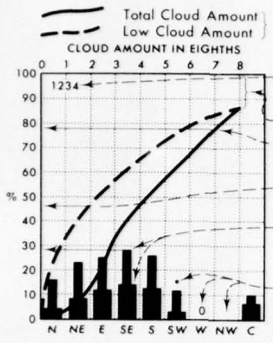
Graphs represent the objective compilation of available data for specified areas without regard to su
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

DECEMBER



ent the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Cumulative percent frequency of indicated cloud amount equal to or less than the amount intersected by the curve.

Number of observations containing total cloud amount.

Obscurations.

(*77% of all total cloud amounts were ≤7/8.*)

(*46% of all low cloud amounts were ≤2/8.*)

(*28% of all SE winds were accompanied by low cloud amounts ≥5/8 and 14% by low cloud amounts ≥7/8.*)

An asterisk indicates that the percentage is based on 10-30 observations of wind direction, total and low cloud amount. 0 replaces bar graph when no low cloud amounts ≥5/8 were observed with a wind direction or calm. 0 or bar is omitted when number of observations of total and low cloud amount from a wind direction or calm is less than 10.

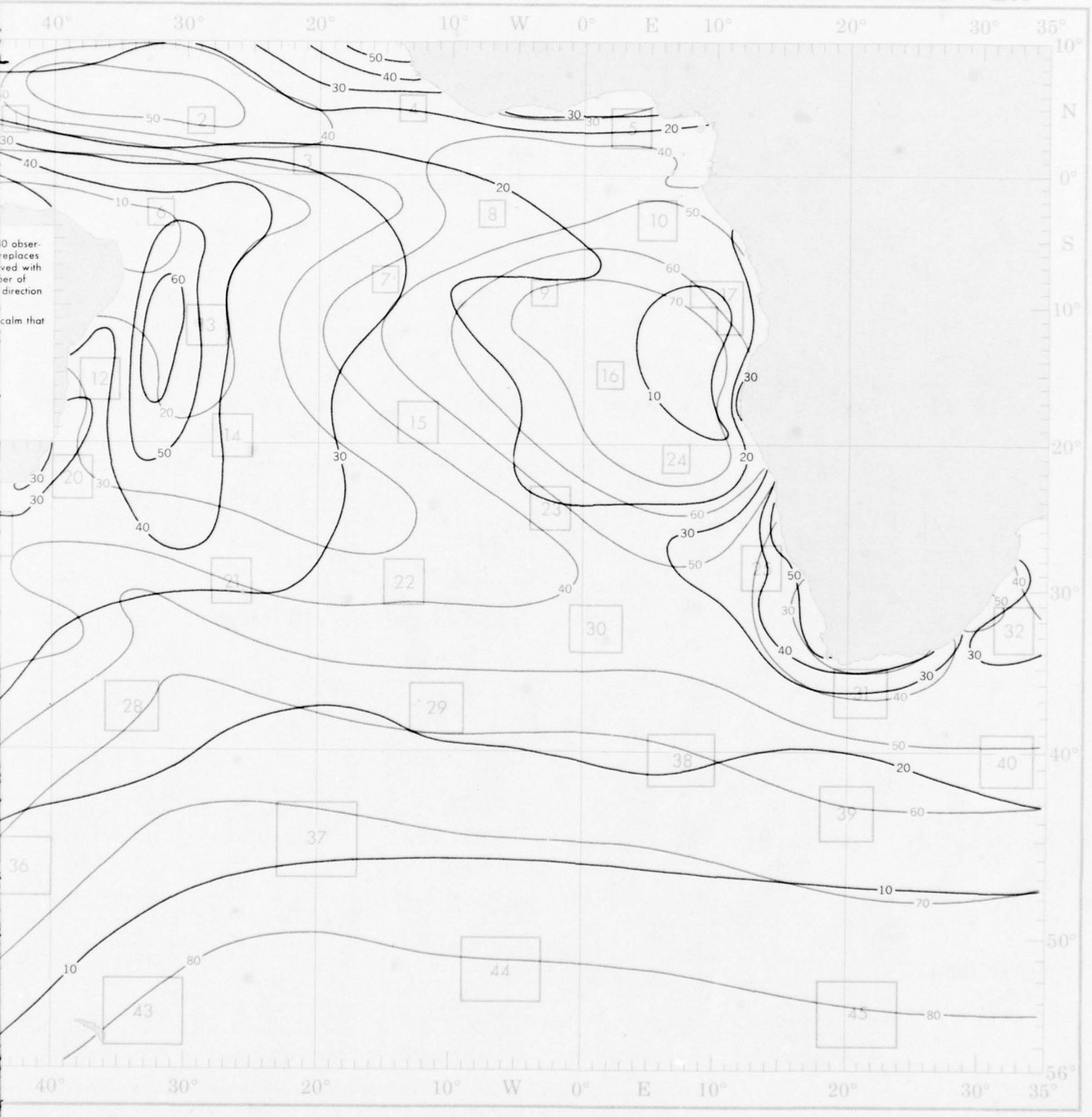


Low cloud amount: Percent frequency of observations from each direction and calm that were accompanied by low cloud amounts ≥5/8 and ≥7/8.
Low clouds are clouds with bases <8000 feet.

BLUE LINE - Percent frequency of total cloud amount ≤2/8

RED LINE - Percent frequency of low cloud amount ≥5/8

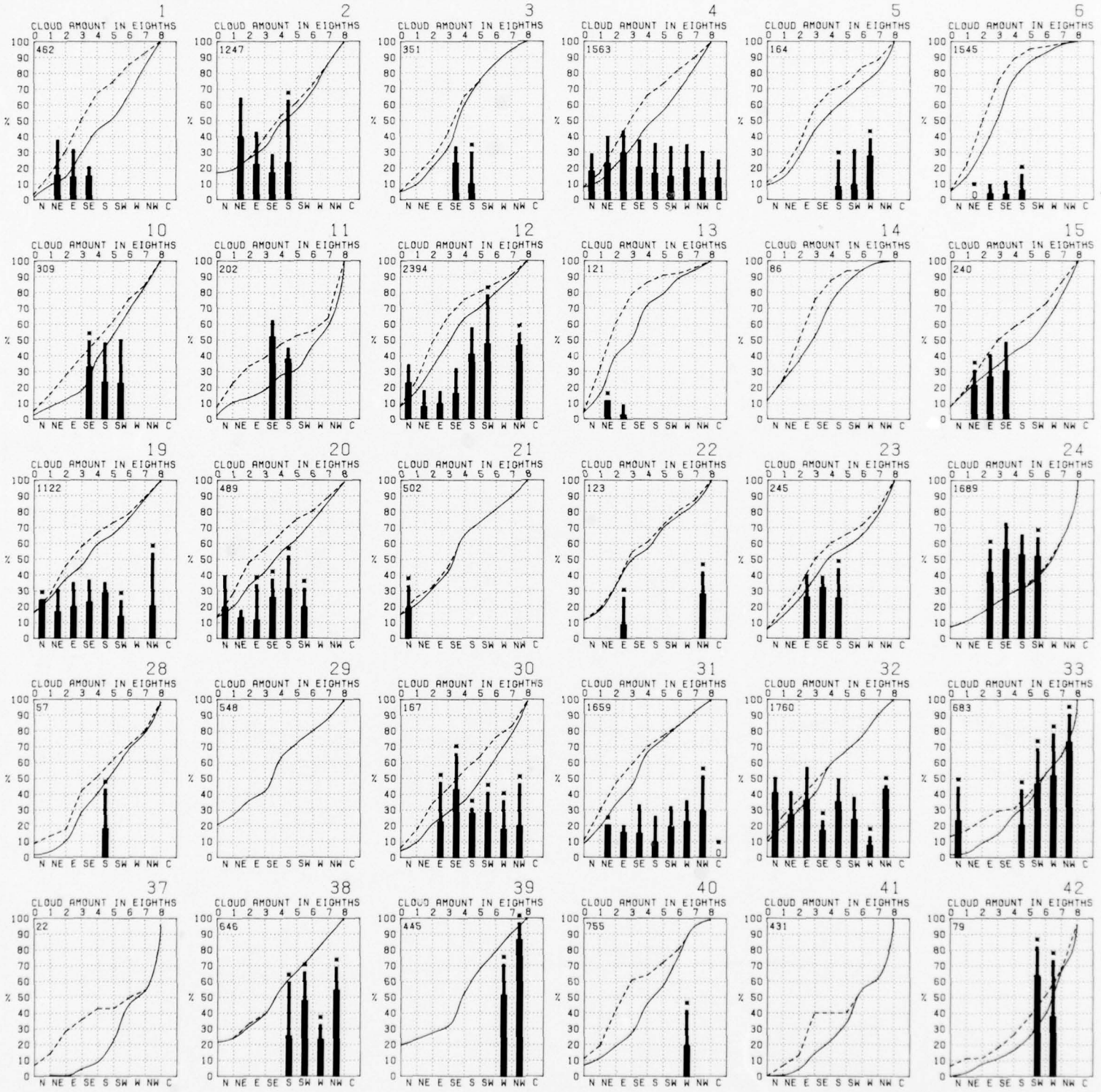
CLOUD COVER



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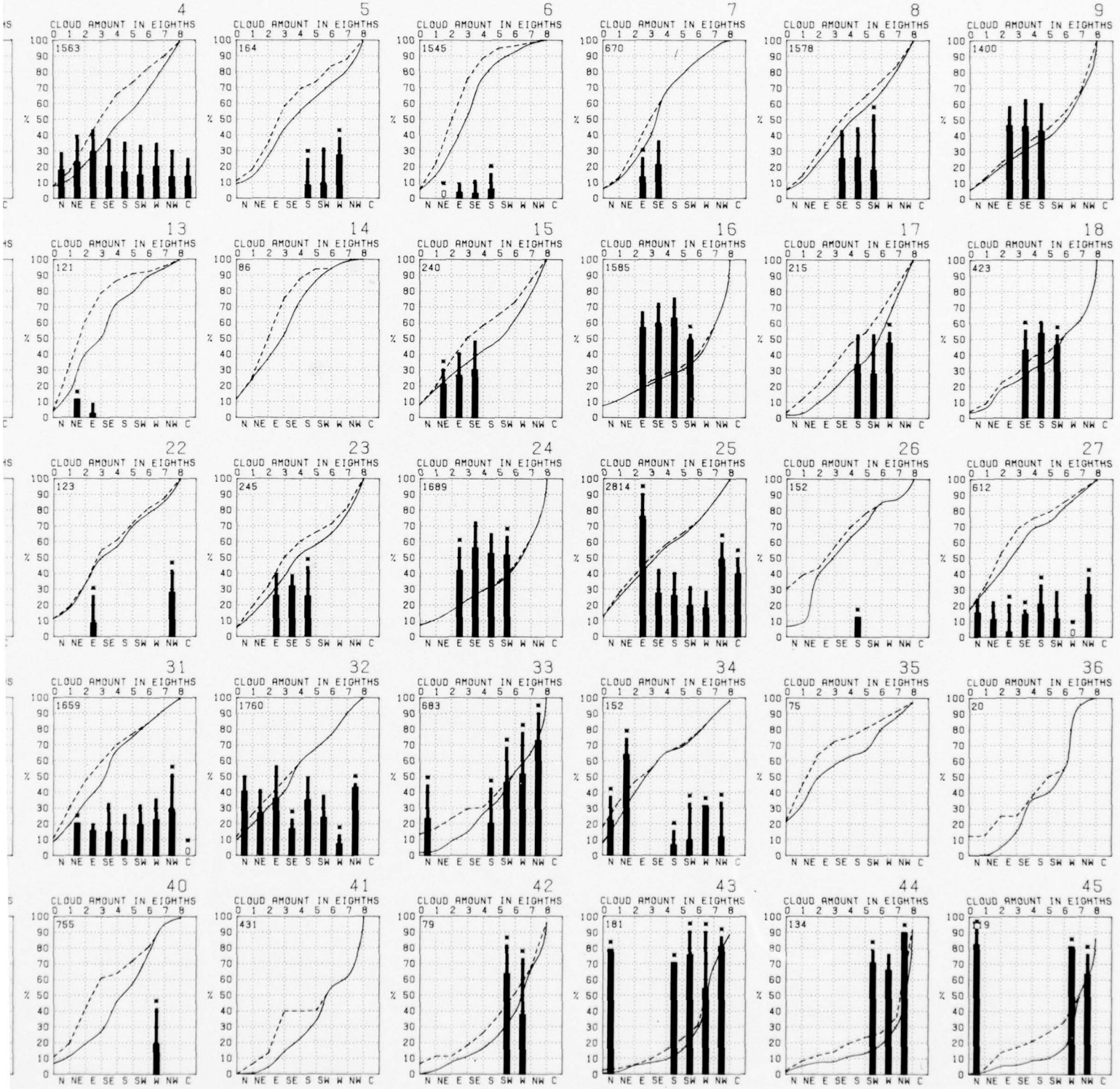
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CLOUD COVER



Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

DECEMBER



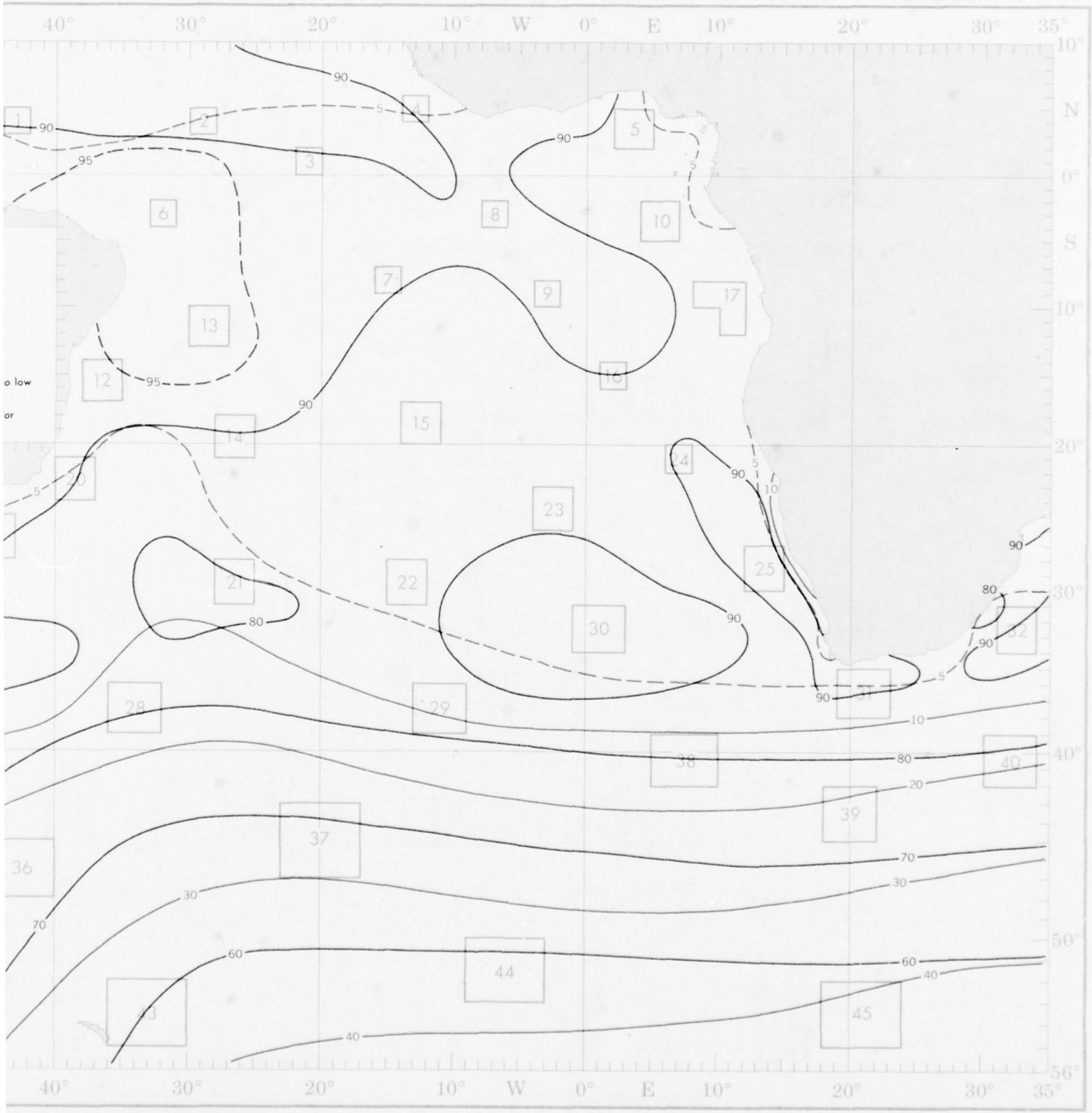
the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



LOW CLOUD CEILING	< ½	½ <1	1 <2	2 <5	5 <10	≥ 10
N C	0	0	+	3	13	64
50 <80	0	0	0	0	+	1
35 <50	0	+	0	0	0	4
20 <35	0	+	1	1	2	2
10 <20	0	+	1	1	2	1
6 <10	0	1	0	+	+	0
3 <6	+	+	0	+	+	0
1.5 <3	+	0	0	0	0	0
0 <1.5	+	0	0	0	0	0

CEILING AND VISIBILITY



CEILING AND VISIBILITY

1

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	65
50<80	0	0	0	0	0	1
35<50	0	0	0	+	1	2
20<35	0	0	0	0	1	2
10<20	0	0	+	+	2	9
6<10	0	0	0	1	3	8
3<6	0	0	0	1	1	1
1.5<3	0	0	0	0	0	1
0<1.5	0	0	0	+	0	0

373

2

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	+	5	50
50<80	0	0	0	0	+	1
35<50	0	0	0	1	1	2
20<35	0	0	+	+	2	5
10<20	0	0	0	+	3	12
6<10	0	0	0	1	3	9
3<6	0	+	0	1	0	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	+

325

3

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	61
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	3
20<35	0	0	0	0	1	4
10<20	0	0	0	0	4	15
6<10	0	0	0	0	0	7
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

72

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	9	57
50<80	0	0	0	0	+	1
35<50	0	0	0	+	+	3
20<35	0	0	0	+	1	5
10<20	0	0	0	1	3	10
6<10	+	+	+	+	2	5
3<6	0	+	0	0	+	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	+	0

1035

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	9	57
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	1	1	5
10<20	0	0	0	0	2	8
6<10	0	0	0	0	6	6
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

106

10

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	49
50<80	0	0	0	0	0	2
35<50	0	0	0	0	1	3
20<35	0	0	0	1	3	13
10<20	0	0	0	0	1	17
6<10	0	0	0	0	0	8
3<6	0	0	0	0	0	1
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

172

11

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	2	45
50<80	0	0	0	0	0	1
35<50	0	0	0	0	0	8
20<35	0	0	0	0	0	11
10<20	0	0	0	0	0	21
6<10	0	0	0	0	0	10
3<6	0	0	0	0	0	2
1.5<3	C	0	0	0	0	0
0<1.5	0	0	0	0	0	0

122

12

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	3	73
50<80	0	0	0	0	+	1
35<50	0	0	0	+	1	1
20<35	0	0	0	+	+	4
10<20	0	0	0	+	2	8
6<10	0	0	0	+	2	3
3<6	0	0	+	+	+	1
1.5<3	0	+	0	0	0	+
0<1.5	0	0	0	0	+	0

1321

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	86
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	3
20<35	0	0	0	0	0	3
10<20	0	0	0	0	0	5
6<10	0	0	0	0	0	2
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

63

14

INSUFFICIENT DATA

19

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	66
50<80	0	0	+	1	+	1
35<50	0	0	0	+	2	4
20<35	0	0	0	1	2	4
10<20	0	0	0	+	3	7
6<10	0	0	0	+	1	2
3<6	0	0	0	0	0	+
1.5<3	0	0	0	0	0	0
0<1.5	0	0	+	+	0	0

365

20

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	11	54
50<80	0	0	1	0	0	1
35<50	1	0	0	0	2	3
20<35	0	0	0	0	3	8
10<20	0	0	0	0	2	6
6<10	0	0	1	1	1	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	0	0

201

21

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	4	48
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	0	15
10<20	0	0	0	4	7	11
6<10	0	0	0	0	4	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

27

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	63
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	2
20<35	0	0	0	0	0	12
10<20	0	2	0	0	2	15
6<10	0	0	0	2	0	3
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

60

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	2	59
50<80	0	0	0	0	0	2
35<50	0	0	0	0	1	3
20<35	0	0	0	0	0	7
10<20	0	0	0	0	1	15
6<10	0	0	0	0	1	11
3<6	0	0	0	0	1	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

181

28

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	0	51
50<80	0	0	0	0	0	2
35<50	0	0	0	0	0	4
20<35	0	0	0	0	4	16
10<20	0	0	0	2	0	4
6<10	0	0	0	0	4	7
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	2	0	0	2	0	0

45

29

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	9	3	40
50<80	0	0	0	0	0	3
35<50	0	0	0	0	0	6
20<35	0	0	0	3	0	3
10<20	0	0	0	0	6	6
6<10	0	0	3	3	3	9
3<6	0	0	0	3	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	3	0

35

30

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	1	4	51
50<80	0	0	0	0	0	4
35<50	0	0	0	0	1	3
20<35	0	0	0	0	1	13
10<20	0	0	0	1	3	12
6<10	0	0	0	0	1	5
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	1	0
0<1.5	0	0	0	0	0	0

107

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	+	0	4	66
50<80	0	0	0	0	1	2
35<50	0	0	0	0	0	2
20<35	+	0	0	+	1	7
10<20	+	0	+	0	2	9
6<10	0	+	+	+	2	3
3<6	0	+	0	+	+	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

381

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	7	51
50<80	+	0	0	0	+	+
35<50	0	0	0	0	1	1
20<35	0	0	0	0	1	7
10<20	0	0	0	+	4	14
6<10	0	0	0	+	3	6
3<6	0	0	0	0	1	2
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

407

37

INSUFFICIENT DATA

38

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	5	8	33
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	7
20<35	0	0	0	0	5	20
10<20	0	0	0	2	0	5
6<10	0	0	0	0	5	3
3<6	0	0	0	2	0	0
1.5<3	0	0	0	0	0	0
0<1.5	5	0	0	0	0	0

60

39

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	3	9	15
50<80	0	0	0	0	0	0
35<50	0	0	0	0	3	3
20<35	0	0	0	0	15	0
10<20	0	0	0	15	6	6
6<10	0	3	6	0	6	6
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	3	0	0	0	0	0

33

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	3	60
50<80	0	0	0	0	0	0
35<50	0	0	0	0	3	9
20<35	0	0	0	0	0	11
10<20	0	0	0	0	0	14
6<10	0	0	0	0	0	0
3<6	0	0	0	0	0	0
1.5<3	0	0	0	0	0	0
0<1.5	0	0	0	0	0	0

35

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2<1	1<2	2<5	5<10	≥10
NC	0	0	0	0	20	27
50<80	0	0	0	0	0	0
35<50	0	0	0	0	0	0
20<35	0	0	0	0	20	0
10<20	0	0	0	0	0	13
6<10	0	0	0	0	0	0
3<6	0	0	0	0	7	0
1.5<3	0	0	0	0	0	0
0<1.5	7	0	0	7	0	0

15

Graphs represent the objective compilation of available data for specified areas without re
The isopleth analyses (opposite page) are based on all available data subjectively adjusted

DECEMBER

4

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	1	9	57
50–<80	0	0	0	0	+	1
35–<50	0	0	0	+	+	3
20–<35	0	0	0	+	1	5
10–<20	0	0	0	1	3	10
6–<10	+	+	+	+	2	5
3–<6	0	+	0	0	+	1
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	+	0

1035

5

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	3	9	57
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	2
20–<35	0	0	0	1	1	5
10–<20	0	0	0	0	2	8
6–<10	0	0	0	0	6	6
3–<6	0	0	0	0	0	1
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

106

6

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	4	85
50–<80	0	0	0	0	0	1
35–<50	0	0	0	0	0	1
20–<35	0	0	0	0	1	2
10–<20	0	0	0	0	1	5
6–<10	0	0	0	0	0	2
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

514

7

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	1	65
50–<80	0	0	0	0	0	1
35–<50	0	0	0	0	0	2
20–<35	0	0	0	0	0	3
10–<20	0	0	0	0	1	15
6–<10	0	0	0	0	1	11
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

93

8

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	1	55
50–<80	0	0	0	0	+	2
35–<50	0	0	0	0	+	5
20–<35	0	0	0	0	+	11
10–<20	0	0	0	0	1	19
6–<10	0	0	0	0	+	5
3–<6	0	0	0	0	+	+
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	+	0

1213

9

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	+	37
50–<80	0	0	0	0	+	2
35–<50	0	0	0	0	+	7
20–<35	0	0	0	0	+	16
10–<20	0	0	0	+	+	28
6–<10	0	0	0	0	+	6
3–<6	0	0	0	0	0	1
1.5–<3	0	0	0	0	0	+
0–<1.5	0	0	0	0	+	0

1121

13

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	0	86
50–<80	0	0	0	0	0	2
35–<50	0	0	0	0	0	3
20–<35	0	0	0	0	0	3
10–<20	0	0	0	0	0	5
6–<10	0	0	0	0	0	2
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

63

14

INSUFFICIENT DATA

15

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	1	58
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	3
20–<35	0	0	0	0	1	10
10–<20	0	0	0	0	2	13
6–<10	0	0	0	1	1	10
3–<6	0	0	0	0	0	1
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

175

16

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	+	28
50–<80	0	0	0	0	0	3
35–<50	0	0	0	+	+	8
20–<35	0	0	0	+	1	18
10–<20	0	0	0	0	1	32
6–<10	0	0	0	+	+	7
3–<6	0	0	0	+	0	1
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

1240

17

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	2	47
50–<80	0	0	0	0	0	3
35–<50	0	0	0	0	0	9
20–<35	0	0	0	0	1	13
10–<20	0	0	0	0	3	20
6–<10	0	0	0	0	1	2
3–<6	0	0	0	0	1	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

179

18

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	2	36
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	1	3
20–<35	0	0	0	0	1	11
10–<20	0	0	0	0	5	27
6–<10	0	0	0	0	1	12
3–<6	0	0	0	0	0	1
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

154

22

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	0	63
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	2
20–<35	0	0	0	0	0	12
10–<20	0	2	0	0	2	15
6–<10	0	0	0	2	0	3
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

60

23

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	2	59
50–<80	0	0	0	0	0	2
35–<50	0	0	0	0	1	3
20–<35	0	0	0	0	0	7
10–<20	0	0	0	0	1	15
6–<10	0	0	0	0	1	11
3–<6	0	0	0	0	1	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

181

24

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	1	29
50–<80	0	0	0	0	+	3
35–<50	0	0	0	0	+	6
20–<35	0	0	0	0	1	18
10–<20	0	0	0	+	2	30
6–<10	0	0	+	+	1	8
3–<6	0	0	0	0	+	1
1.5–<3	0	0	0	0	+	0
0–<1.5	0	0	0	0	0	+

1295

25

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	+	5	54
50–<80	0	0	0	0	+	2
35–<50	0	0	0	0	+	4
20–<35	0	0	0	+	1	9
10–<20	0	0	0	+	2	16
6–<10	0	0	0	+	1	4
3–<6	0	0	0	0	+	+
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

1995

26

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	0	57
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	0
20–<35	0	0	0	0	0	10
10–<20	0	0	0	0	5	14
6–<10	0	0	0	0	0	5
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

21

27

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	+	0	0	+	6	70
50–<80	0	0	0	0	0	1
35–<50	0	0	0	0	+	2
20–<35	0	0	0	0	3	6
10–<20	0	0	0	0	1	6
6–<10	0	0	0	0	+	+
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

218

31

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	+	0	4	66
50–<80	0	0	0	0	1	2
35–<50	0	0	0	0	0	2
20–<35	+	0	0	+	1	7
10–<20	+	0	+	0	2	9
6–<10	0	+	+	+	2	3
3–<6	0	+	0	+	+	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

381

32

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	7	51
50–<80	+	0	0	0	+	+
35–<50	0	0	0	0	1	1
20–<35	0	0	0	0	1	7
10–<20	0	0	0	+	4	14
6–<10	0	0	0	+	3	6
3–<6	0	0	0	0	1	2
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

407

33

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	1	0	2	32
50–<80	0	0	0	0	0	4
35–<50	0	0	0	0	0	1
20–<35	0	0	0	0	4	11
10–<20	0	0	1	0	7	16
6–<10	0	0	0	1	6	7
3–<6	0	0	0	0	2	2
1.5–<3	0	0	0	0	1	0
0–<1.5	0	0	0	0	1	0

90

34

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	4	61
50–<80	0	0	0	0	0	3
35–<50	0	0	0	1	1	0
20–<35	0	0	0	1	1	7
10–<20	0	0	0	1	4	4
6–<10	0	0	0	0	1	3
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	3	1	0	1	0	0

71

35

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	7	73
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	0
20–<35	0	0	0	0	3	3
10–<20	0	0	0	0	0	0
6–<10	0	0	0	0	7	0
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	7	0	0	0	0	0

30

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INSUFFICIENT DATA

40

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	3	60
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	3	9
20–<35	0	0	0	0	0	11
10–<20	0	0	0	0	0	14
6–<10	0	0	0	0	0	0
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	0	0	0	0	0	0

35

41

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	20	27
50–<80	0	0	0	0	0	0
35–<50	0	0	0	0	0	0
20–<35	0	0	0	0	20	0
10–<20	0	0	0	0	0	13
6–<10	0	0	0	0	0	0
3–<6	0	0	0	0	7	0
1.5–<3	0	0	0	0	0	0
0–<1.5	7	0	0	7	0	0

15

42

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	8	19
50–<80	0	0	0	0	2	2
35–<50	0	0	0	0	0	10
20–<35	0	0	0	2	0	14
10–<20	0	0	0	0	5	15
6–<10	0	0	0	0	2	0
3–<6	2	0	2	0	2	0
1.5–<3	0	0	0	0	0	0
0–<1.5	3	0	2	0	0	0

59

43

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	1	0	0	0	2	12
50–<80	0	0	0	0	0	2
35–<50	0	0	0	0	1	5
20–<35	0	0	0	1	9	25
10–<20	0	0	0	6	11	17
6–<10	0	0	0	0	1	1
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	1
0–<1.5	1	0	0	1	0	0

81

44

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	1	1	8	12
50–<80	0	0	0	0	1	2
35–<50	0	0	0	0	1	2
20–<35	0	0	1	4	19	2
10–<20	0	2	3	7	6	2
6–<10	1	2	3	6	2	0
3–<6	1	2	0	5	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	8	0	0	0	0	0

132

45

LOW CLOUD CEILING	VISIBILITY <1/2	1/2–<1	1–<2	2–<5	5–<10	≥10
NC	0	0	0	0	2	18
50–<80	0	0	0	0	1	1
35–<50	0	0	0	0	2	9
20–<35	0	0	2	0	5	14
10–<20	0	0	1	3	6	7
6–<10	1	0	1	6	1	0
3–<6	0	0	0	0	0	0
1.5–<3	0	0	0	0	0	0
0–<1.5	11	5	1	1	0	0

87

t the objective compilation of available data for specified areas without regard to suspected biases.
yses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER



Percent frequency of occurrence of specified wind speed in knots, visibility (Vsby) in nautical miles, and low cloud ceiling (LCC) in hundreds of feet.

Low cloud ceiling heights are estimated from the height of low clouds (h) when low cloud amount (N_h) is ≥5/8.

WIND SPEED (knots)

LCC - Vsby	0-3	4-10	11-21	22-33	≥34
<1.5 & or <5	+	1	1	+	0
<6 & or <2	2	2	1	1	+
Vsby <2	1	2	1	1	+
<10 & or <2	3	4	2	1	1
<20 & or <5	8	9	6	5	2
Vsby ≥5	9	11	12	3	1
≥30 & ≥5	12	13	15	7	3
N C & ≥10	4	2	1	+	0

(2% of the observations reported wind speeds of 11-21 knots, a low cloud ceiling <1000 feet and/or visibility <2 nautical miles.)

"N C" (no ceiling) includes bases of clouds ≥8000 feet as well as occurrences of N_h <5/8.

+ indicates <.5% but >0.

1234 ← Number of observations.

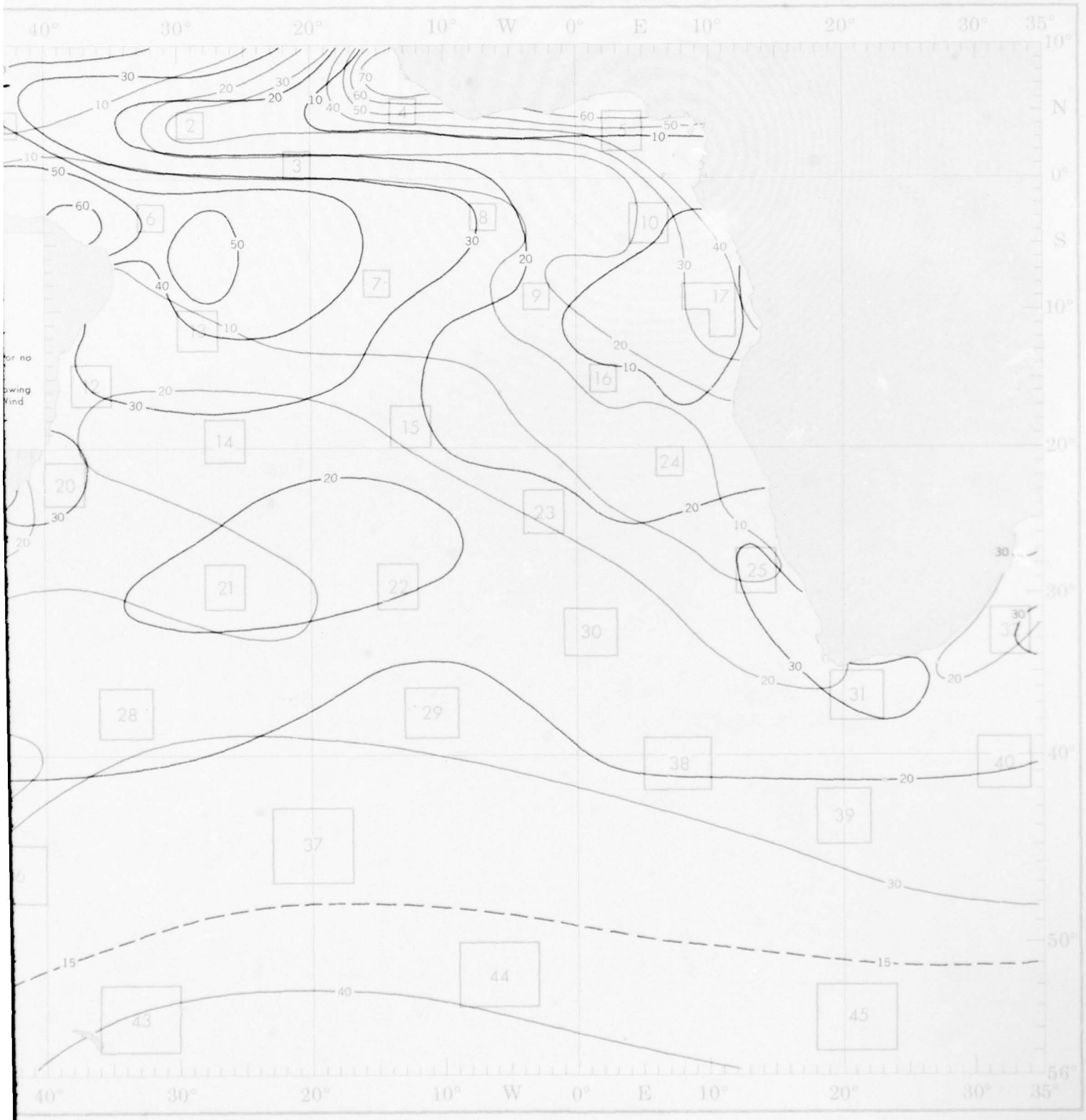
Conditions for Carrier Operations

BLUE LINE - Percent frequency of optimum conditions: LCC ≥5000 ft., (or no LCC), Vsby ≥5 nm. and Wind 11-21 kts.

RED LINE - Percent frequency of poor conditions. Any one of the following constitutes poor conditions: LCC <300 ft., Vsby <1 nm., Wind <6 or ≥34 kts.

Satisfactory conditions-between poor and optimum

WIND-VISIBILITY-CLOUDINESS



LOW CLOUD CEILING-VISIBILITY-WIND

1

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	+	1	2	+	0
VSBY <2	0	+	0	0	0
<10 & OR <2	1	4	11	1	0
<20 & OR <5	1	9	17	1	0
VSBY ≥5	2	35	61	1	0
≥50 & ≥5	1	24	42	0	0
NC & ≥10	1	24	40	0	0

373

2

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	2	2	1	0	0
VSBY <2	0	1	0	0	0
<10 & OR <2	3	9	4	0	0
<20 & OR <5	5	21	7	0	0
VSBY ≥5	13	61	22	+	0
≥50 & ≥5	7	38	12	+	0
NC & ≥10	7	34	10	0	0

317

3

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	3	0	0
<20 & OR <5	1	15	11	0	0
VSBY ≥5	10	56	35	0	0
≥50 & ≥5	6	36	22	0	0
NC & ≥10	6	35	21	0	0

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4

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	5	2	0	0
<20 & OR <5	5	14	4	0	0
VSBY ≥5	33	57	8	+	0
≥50 & ≥5	25	38	4	+	0
NC & ≥10	21	33	3	0	0

984

5

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	10	2	0	0
<20 & OR <5	4	19	4	0	0
VSBY ≥5	17	70	9	0	0
≥50 & ≥5	15	44	5	0	0
NC & ≥10	12	38	4	0	0

99

6

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	1	0	0
<20 & OR <5	0	3	4	0	0
VSBY ≥5	+	47	52	1	0
≥50 & ≥5	+	43	46	1	0
NC & ≥10	+	41	43	+	0

10

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	2	0	0
<20 & OR <5	1	19	9	0	0
VSBY ≥5	5	66	28	1	0
≥50 & ≥5	3	36	13	0	0
NC & ≥10	3	34	12	0	0

172

11

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	6	4	0	0
<20 & OR <5	2	15	16	0	0
VSBY ≥5	7	46	45	1	0
≥50 & ≥5	4	20	23	1	0
NC & ≥10	4	19	21	1	0

122

12

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	+	1	0	0
VSBY <2	+	+	0	0	0
<10 & OR <2	+	3	3	+	0
<20 & OR <5	1	8	9	1	0
VSBY ≥5	3	56	38	1	0
≥50 & ≥5	3	46	27	1	0
NC & ≥10	3	44	26	1	0

1312

13

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	0	0	0
<20 & OR <5	0	3	3	0	0
VSBY ≥5	0	37	62	2	0
≥50 & ≥5	0	33	52	2	0
NC & ≥10	0	33	51	2	0

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INSUFFICIENT DATA

15

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	1	0
<20 & OR <5	1	7	18	1	0
VSBY ≥5	4	45	49	1	0
≥50 & ≥5	3	29	27	0	0
NC & ≥10	3	29	27	0	0

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WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	+	1	0	0
VSBY <2	0	0	+	0	0
<10 & OR <2	0	2	1	+	0
<20 & OR <5	1	6	7	2	0
VSBY ≥5	7	47	37	7	0
≥50 & ≥5	5	36	27	4	0
NC & ≥10	4	34	25	3	0

361

20

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	1	0	0
<10 & OR <2	0	3	5	1	0
<20 & OR <5	1	6	7	3	0
VSBY ≥5	4	34	54	8	0
≥50 & ≥5	3	22	38	3	0
NC & ≥10	3	20	31	2	0

194

21

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	8	4	0	0
<20 & OR <5	0	12	23	0	0
VSBY ≥5	4	62	31	0	0
≥50 & ≥5	4	38	12	0	0
NC & ≥10	4	35	12	0	0

26

22

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	2	0	0	0
<10 & OR <2	0	3	3	0	0
<20 & OR <5	0	17	7	0	0
VSBY ≥5	9	69	16	3	0
≥50 & ≥5	7	41	10	3	0
NC & ≥10	7	41	10	3	0

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23

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	6	1	0
<20 & OR <5	1	10	16	2	0
VSBY ≥5	7	39	50	4	0
≥50 & ≥5	6	26	28	1	0
NC & ≥10	6	25	27	1	0

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24

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	4	6	+	0
<20 & OR <5	1	14	26	1	0
VSBY ≥5	3	33	60	4	+
≥50 & ≥5	1	11	19	1	+
NC & ≥10	1	10	17	1	+

1290

28

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	5	0
<6 & OR <2	0	0	0	5	0
VSBY <2	0	0	0	2	0
<10 & OR <2	0	5	5	7	0
<20 & OR <5	2	5	7	7	0
VSBY ≥5	5	18	57	16	0
≥50 & ≥5	2	14	32	7	0
NC & ≥10	2	14	30	7	0

44

29

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	0	0
<6 & OR <2	0	3	0	6	0
VSBY <2	0	0	0	3	0
<10 & OR <2	0	9	3	11	0
<20 & OR <5	0	14	9	23	0
VSBY ≥5	0	40	26	14	0
≥50 & ≥5	0	23	14	9	0
NC & ≥10	0	17	14	9	0

35

30

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	3	2	0	0
<20 & OR <5	3	11	10	1	0
VSBY ≥5	13	48	35	3	0
≥50 & ≥5	7	30	19	2	0
NC & ≥10	7	26	17	0	0

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31

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	+	0
<6 & OR <2	+	1	0	1	1
VSBY <2	0	1	0	1	1
<10 & OR <2	+	1	3	2	1
<20 & OR <5	1	4	9	4	2
VSBY ≥5	6	40	36	13	2
≥50 & ≥5	6	32	25	8	+
NC & ≥10	5	29	23	8	+

379

32

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	+	2	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	2	6	2	+
<20 & OR <5	1	8	16	5	+
VSBY ≥5	6	31	46	15	2
≥50 & ≥5	4	19	26	8	1
NC & ≥10	4	17	23	6	+

405

33

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	1	6	0	1
VSBY <2	0	0	1	0	1
<10 & OR <2	1	7	12	1	1
<20 & OR <5	2	11	26	3	2
VSBY ≥5	4	31	55	4	1
≥50 & ≥5	1	12	24	1	0
NC & ≥10	1	9	21	1	0

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INSUFFICIENT DATA

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WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	2	3	0
<6 & OR <2	0	0	3	3	0
VSBY <2	0	0	2	3	0
<10 & OR <2	0	2	8	5	0
<20 & OR <5	0	5	15	7	0
VSBY ≥5	0	27	47	8	0
≥50 & ≥5	0	15	23	3	0
NC & ≥10	0	13	18	2	0

60

39

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	0	0
<6 & OR <2	0	3	3	3	3
VSBY <2	0	3	3	3	3
<10 & OR <2	0	3	12	6	3
<20 & OR <5	0	3	24	12	15
VSBY ≥5	0	9	36	15	9
≥50 & ≥5	0	3	12	6	3
NC & ≥10	0	3	6	6	0

33

40

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	3	6	3	3
VSBY ≥5	6	37	34	17	6
≥50 & ≥5	3	23	23	11	3
NC & ≥10	3	23	23	9	3

35

41

INSUFFICIENT DATA

42

WIND SPEED (KNOTS)

LCC - VSBY	0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	6	0	2	0
<6 & OR <2	0	8	0	2	2
VSBY <2	0	6	0	2	2
<10 & OR <2	0	9	8	4	2
<20 & OR <5	0	19	19	9	2
VSBY ≥5	0	38	26	17	0
≥50 & ≥5	0	21	8	6	0
NC & ≥10	0	13	2	6	0

53

Graphs represent the objective compilation of available data for specified areas without regard
The isopleth analyses (opposite page) are based on all available data subjectively adjusted whe

SIBILITY-WIND

DECEMBER

4

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	+	1	+	0	0
VSBY <2	0	+	+	0	0
<10 & OR <2	2	5	2	0	0
<20 & OR <5	5	14	4	0	0
VSBY ≥5	33	57	8	+	0
≥50 & ≥5	25	38	4	+	0
NC & ≥10	21	33	3	0	0

984

5

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	10	2	0	0
<20 & OR <5	4	19	4	0	0
VSBY ≥5	17	70	9	0	0
≥50 & ≥5	15	44	5	0	0
NC & ≥10	12	38	4	0	0

99

6

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	1	1	0	0
<20 & OR <5	0	3	4	0	0
VSBY ≥5	+	47	52	1	0
≥50 & ≥5	+	43	46	1	0
NC & ≥10	+	41	43	+	0

514

7

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	10	0	0
<20 & OR <5	0	10	18	0	0
VSBY ≥5	1	39	58	2	0
≥50 & ≥5	1	27	37	2	0
NC & ≥10	1	26	35	2	0

93

8

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	+	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	3	+	0
<20 & OR <5	0	12	12	+	0
VSBY ≥5	1	48	50	1	0
≥50 & ≥5	1	27	30	+	0
NC & ≥10	1	26	29	+	0

1206

9

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	0	0
<6 & OR <2	0	1	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	5	2	0	0
<20 & OR <5	+	21	15	0	0
VSBY ≥5	2	60	37	+	0
≥50 & ≥5	1	25	14	0	0
NC & ≥10	1	23	13	0	0

1116

13

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	2	0	0	0
<20 & OR <5	0	3	3	0	0
VSBY ≥5	0	37	62	2	0
≥50 & ≥5	0	33	52	2	0
NC & ≥10	0	33	51	2	0

63

14

INSUFFICIENT DATA

15

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	1	2	9	1	0
<20 & OR <5	1	7	18	1	0
VSBY ≥5	4	45	49	1	0
≥50 & ≥5	3	29	27	0	0
NC & ≥10	3	29	27	0	0

175

16

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	+	+	+	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	4	4	+	0
<20 & OR <5	1	20	21	+	0
VSBY ≥5	4	50	46	+	0
≥50 & ≥5	2	17	12	+	0
NC & ≥10	2	16	10	+	0

1230

17

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	3	0	0	0
<20 & OR <5	0	23	2	0	0
VSBY ≥5	8	80	12	0	0
≥50 & ≥5	7	40	6	0	0
NC & ≥10	4	38	5	0	0

179

18

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	1	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	2	5	8	0	0
<20 & OR <5	6	19	21	1	0
VSBY ≥5	12	37	49	1	0
≥50 & ≥5	6	11	21	1	0
NC & ≥10	5	11	19	1	0

154

22

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	2	0	0	0
VSBY <2	0	2	0	0	0
<10 & OR <2	0	3	3	0	0
<20 & OR <5	0	17	7	0	0
VSBY ≥5	9	69	16	3	0
≥50 & ≥5	7	41	10	3	0
NC & ≥10	7	41	10	3	0

58

23

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	1	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	6	6	1	0
<20 & OR <5	1	10	16	2	0
VSBY ≥5	7	39	50	4	0
≥50 & ≥5	6	26	28	1	0
NC & ≥10	6	25	27	1	0

179

24

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	+	0
<6 & OR <2	0	+	1	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	+	4	6	+	0
<20 & OR <5	1	14	26	1	0
VSBY ≥5	3	33	60	4	+
≥50 & ≥5	1	11	19	1	+
NC & ≥10	1	10	17	1	+

1290

25

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	+	+	+	0
VSBY <2	0	0	0	0	0
<10 & OR <2	+	1	3	1	+
<20 & OR <5	1	6	14	5	+
VSBY ≥5	3	25	51	19	1
≥50 & ≥5	2	16	31	12	1
NC & ≥10	2	15	28	10	1

1990

26

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	5	0	0
<20 & OR <5	10	0	14	0	0
VSBY ≥5	10	10	33	48	0
≥50 & ≥5	0	5	19	43	0
NC & ≥10	0	5	19	43	0

21

27

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	+	0	0	0	0
<6 & OR <2	+	0	0	0	0
VSBY <2	+	0	0	0	0
<10 & OR <2	+	0	+	+	0
<20 & OR <5	1	3	3	2	1
VSBY ≥5	4	32	48	11	3
≥50 & ≥5	3	26	38	8	2
NC & ≥10	3	23	35	6	2

216

31

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	+	0	+	0
<6 & OR <2	+	1	0	1	1
VSBY <2	0	1	0	1	1
<10 & OR <2	+	1	3	2	1
<20 & OR <5	1	4	9	4	2
VSBY ≥5	6	40	36	13	2
≥50 & ≥5	6	32	25	8	+
NC & ≥10	5	29	23	8	+

379

32

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	+	0	0
<6 & OR <2	+	+	2	+	0
VSBY <2	0	0	+	0	0
<10 & OR <2	1	2	6	2	+
<20 & OR <5	1	8	16	5	+
VSBY ≥5	6	31	46	15	2
≥50 & ≥5	4	19	26	8	1
NC & ≥10	4	17	23	6	+

405

33

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	1	0	0	0	0
<6 & OR <2	1	1	6	0	1
VSBY <2	0	0	1	0	1
<10 & OR <2	1	7	12	1	1
<20 & OR <5	2	11	26	3	2
VSBY ≥5	4	31	55	4	1
≥50 & ≥5	1	12	24	1	0
NC & ≥10	1	9	21	1	0

89

34

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	3	0	0
<6 & OR <2	0	3	3	0	0
VSBY <2	0	3	1	0	0
<10 & OR <2	0	4	4	0	1
<20 & OR <5	1	6	13	1	1
VSBY ≥5	1	34	34	17	4
≥50 & ≥5	1	30	21	13	3
NC & ≥10	1	28	17	11	3

71

35

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	7	0	0	0
<6 & OR <2	0	7	0	0	0
VSBY <2	0	7	0	0	0
<10 & OR <2	0	10	3	0	0
<20 & OR <5	0	10	3	0	0
VSBY ≥5	13	23	43	13	0
≥50 & ≥5	13	20	33	13	0
NC & ≥10	13	20	30	10	0

30

36

INSUFFICIENT DATA

40

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	0	0	0
<6 & OR <2	0	0	0	0	0
VSBY <2	0	0	0	0	0
<10 & OR <2	0	0	0	0	0
<20 & OR <5	0	3	6	3	3
VSBY ≥5	6	37	34	17	6
≥50 & ≥5	3	23	23	11	3
NC & ≥10	3	23	23	9	3

35

41

INSUFFICIENT DATA

42

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	6	0	2	0
<6 & OR <2	0	8	0	2	2
VSBY <2	0	6	0	2	2
<10 & OR <2	0	9	8	4	2
<20 & OR <5	0	19	19	9	2
VSBY ≥5	0	38	26	17	0
≥50 & ≥5	0	21	8	6	0
NC & ≥10	0	13	2	6	0

53

43

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	3	0	1	0
<6 & OR <2	0	3	1	1	0
VSBY <2	0	1	0	1	0
<10 & OR <2	0	3	4	1	0
<20 & OR <5	0	15	24	5	0
VSBY ≥5	4	33	46	6	0
≥50 & ≥5	1	5	9	3	0
NC & ≥10	1	3	8	1	0

80

44

LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	0	5	4	0
<6 & OR <2	0	1	8	11	7
VSBY <2	0	0	8	11	4
<10 & OR <2	0	1	9	18	8
<20 & OR <5	0	2	14	23	17
VSBY ≥5	0	2	18	26	9
≥50 & ≥5	0	1	6	12	3
NC & ≥10	0	0	3	8	2

132

45

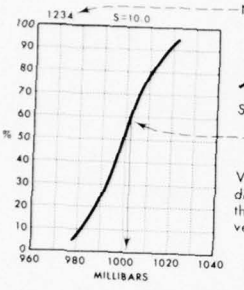
LCC - VSBY	WIND SPEED (KNOTS) 0-3	4-10	11-21	22-33	≥34
<1.5 & OR <.5	0	4	16	0	0
<6 & OR <2	0	4	20	0	0
VSBY <2	0	4	19	0	0
<10 & OR <2	0	4	26	1	0
<20 & OR <5	0	7	36	4	0
VSBY ≥5	9	31	21	6	0
≥50 & ≥5	0	9	12	1	0
NC & ≥10	0	9	9	0	0

85

nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER

SEA LEVEL PRES



Sea level pressure and mean wind.

Number of observations.

Cumulative percent frequency of sea level pressures equal to or less than the pressure intersected by the curve.

S: Standard deviation of pressure (mbs).

(60% of all observed sea level pressures were ≤1002 millibars.)

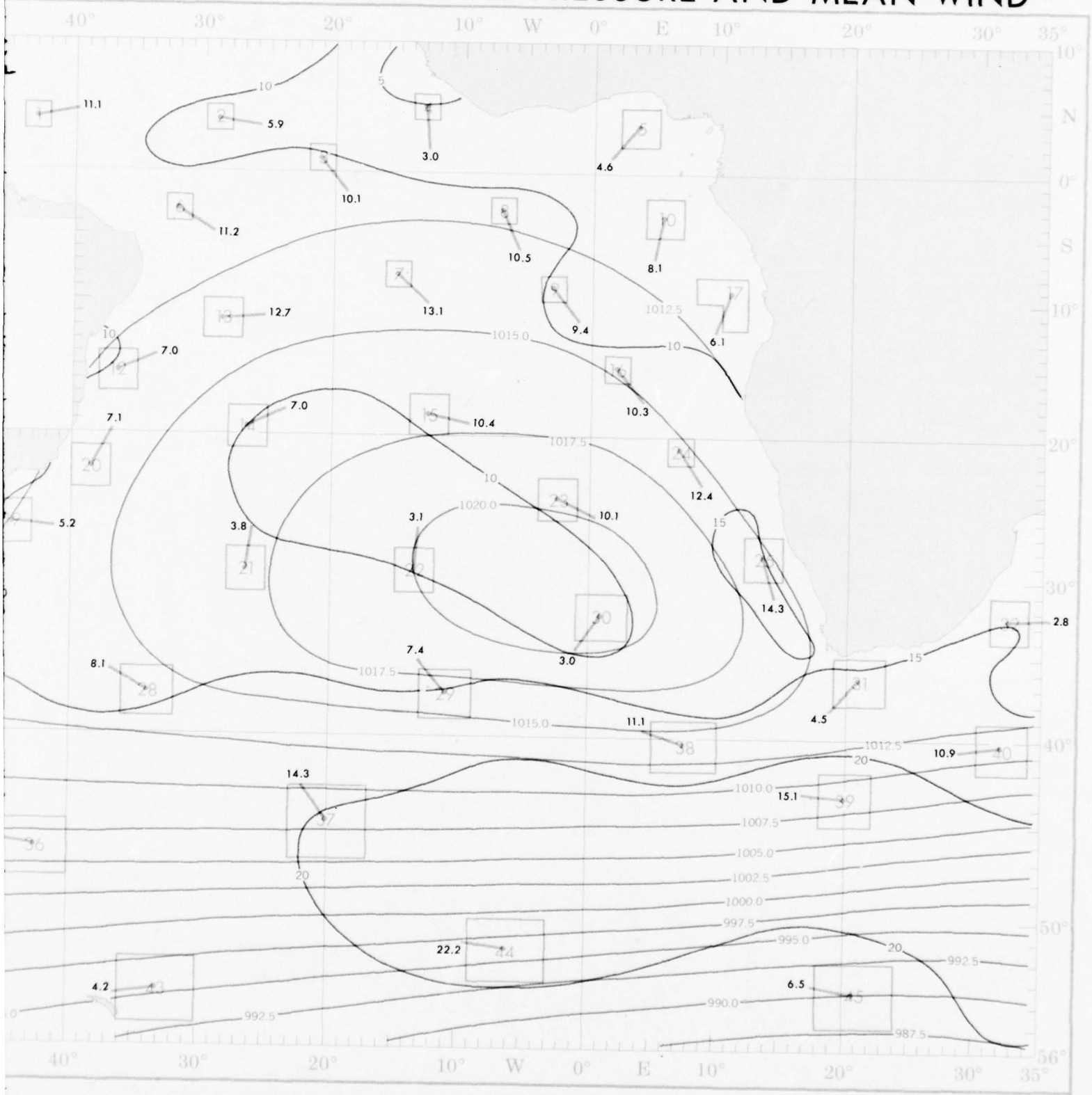
Vector mean wind is plotted from the *direction which the mean flow* occurs with the magnitude in knots at the end of the vector.

10.2 Vector mean wind is from the northeast at 10.2 knots.

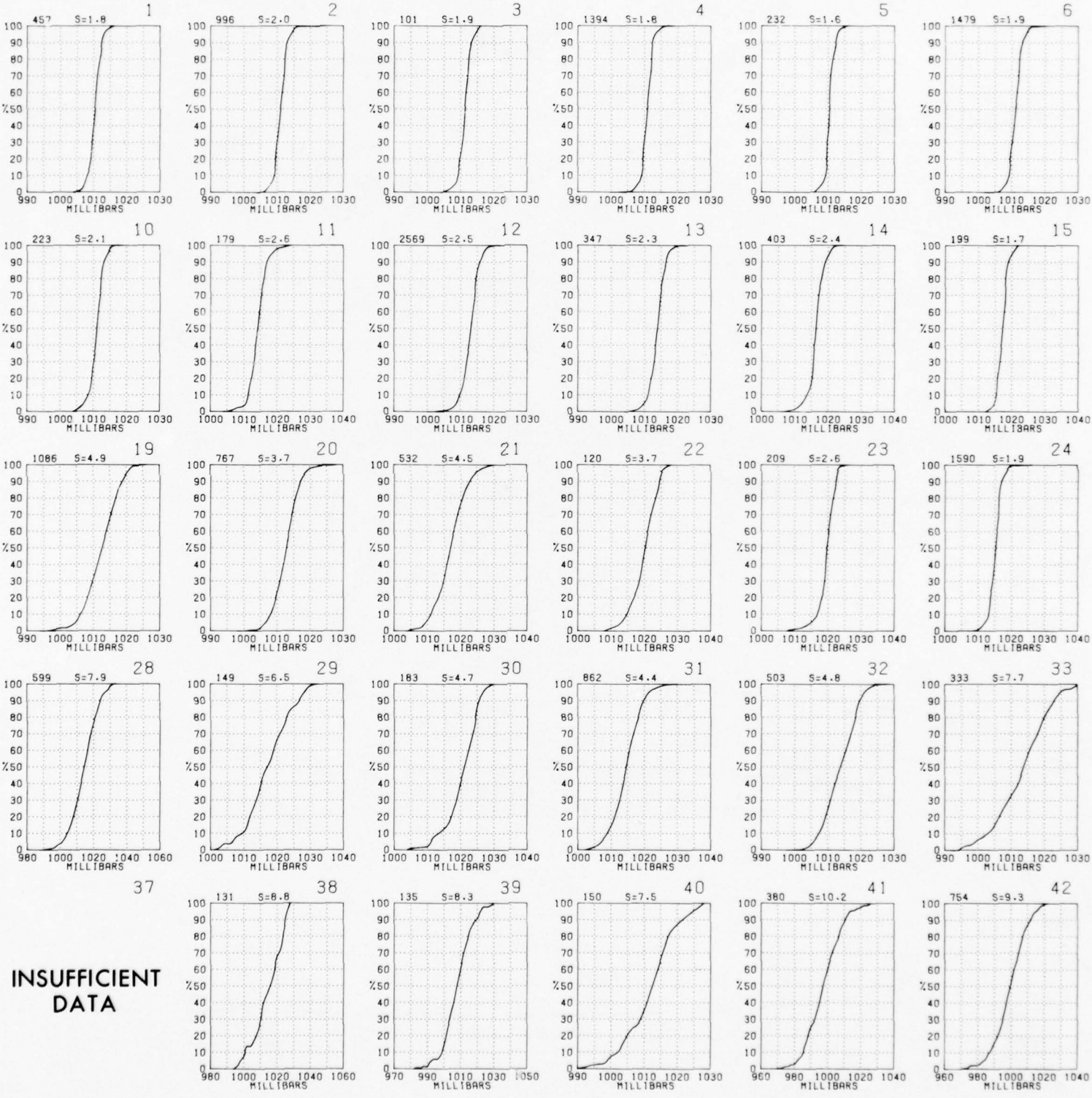
BLUE LINE - Scalar mean wind speed (kts.)

RED LINE - Mean sea level pressure (mbs.)

SEA LEVEL PRESSURE AND MEAN WIND



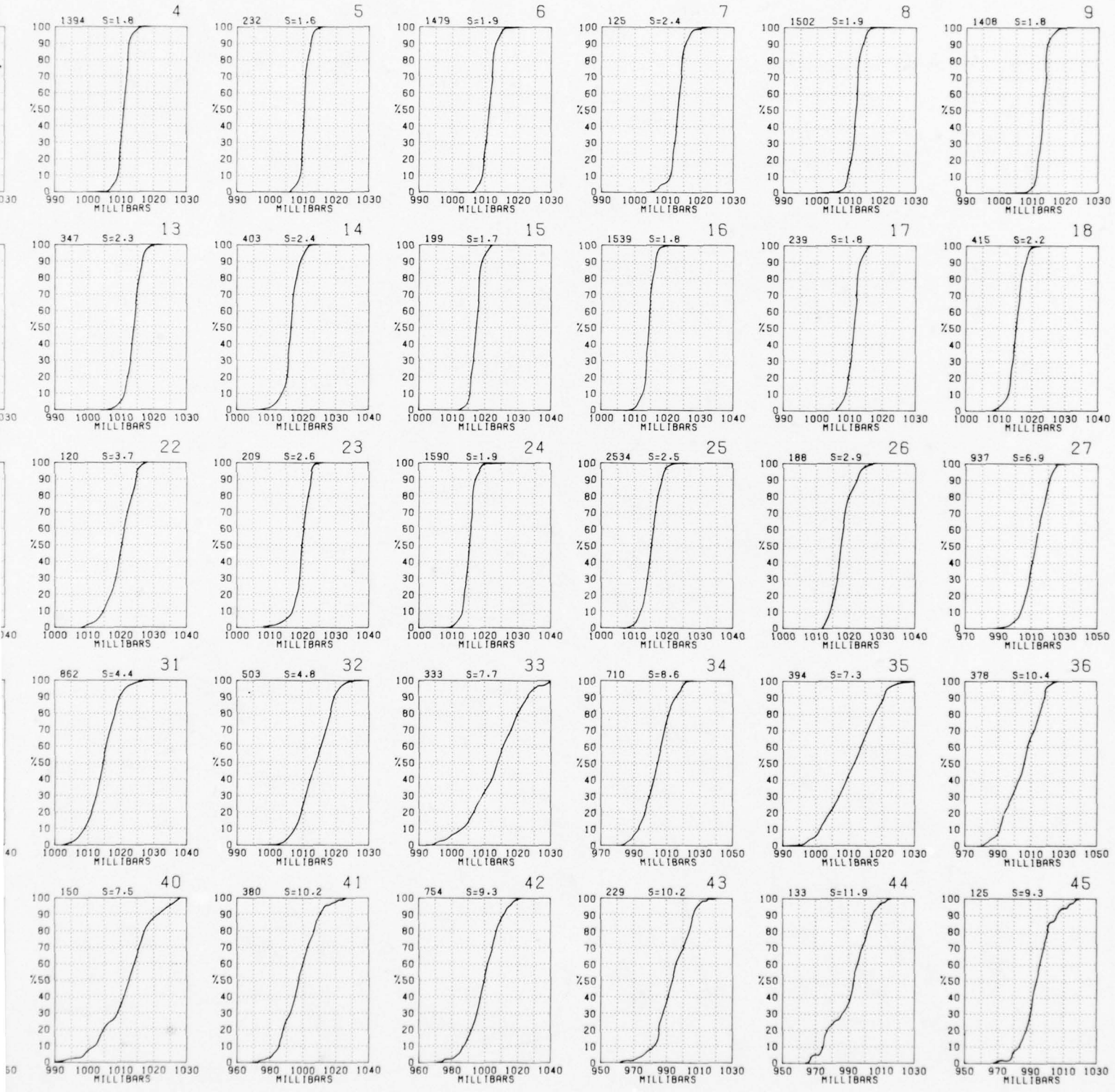
SEA LEVEL PRESSURE



INSUFFICIENT DATA

Graphs represent the objective compilation of available data for specified areas without regard to
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where

DECEMBER



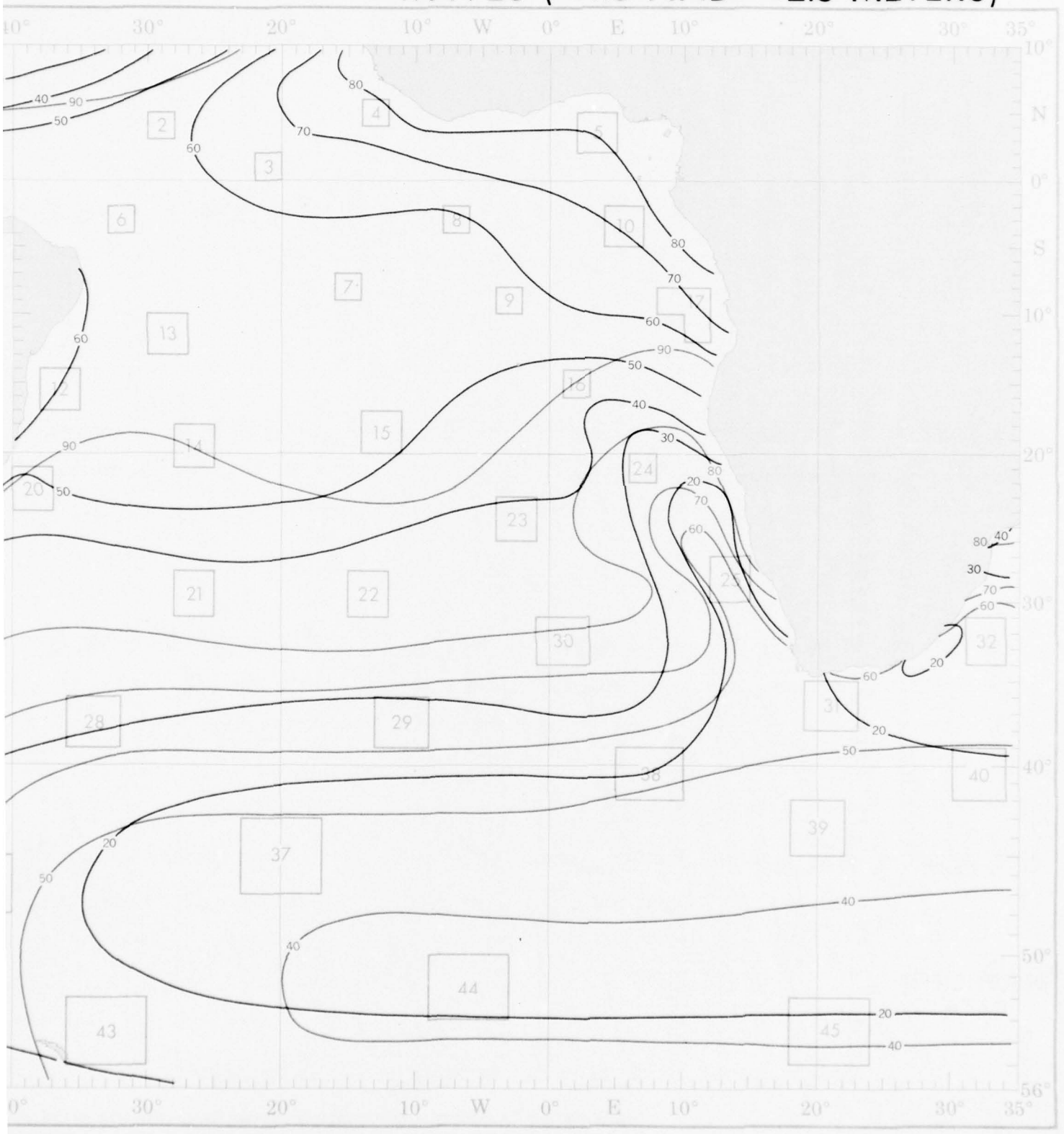
nt the objective compilation of available data for specified areas without regard to suspected biases.
alyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER

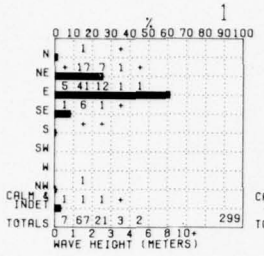
WAVES (<

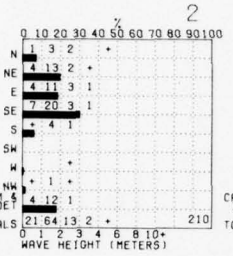


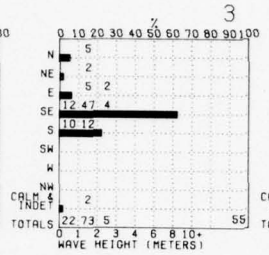
WAVES (<1.5 AND <2.5 METERS)

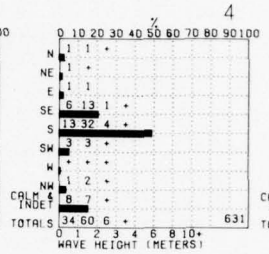


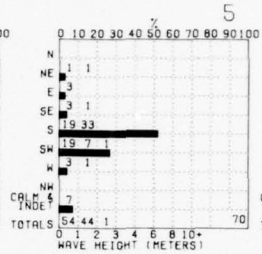
WAVE DIRECTION AND HEIGHT

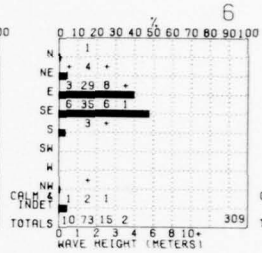


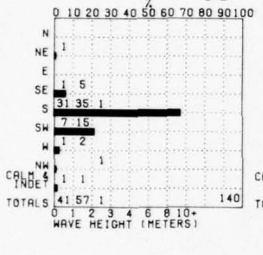


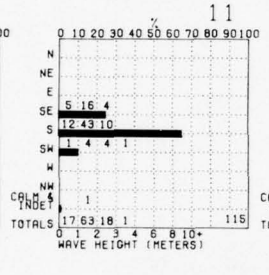


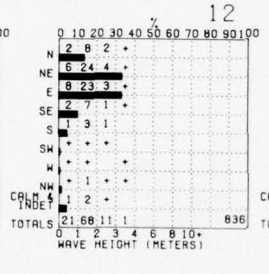


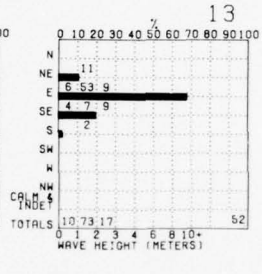






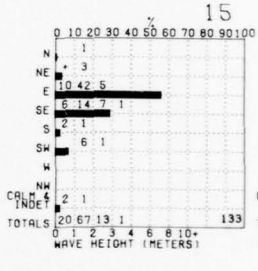


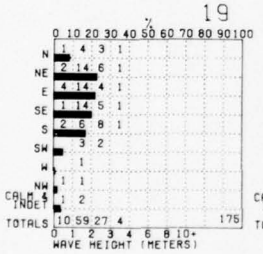


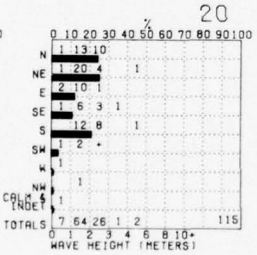


14

INSUFFICIENT DATA

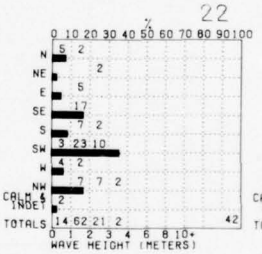


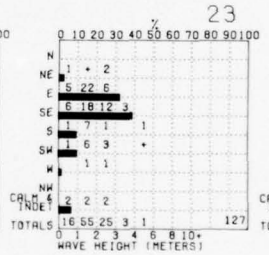


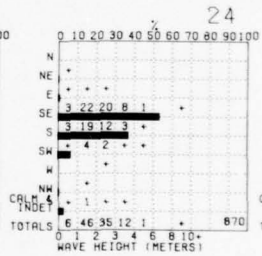


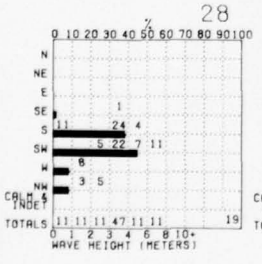
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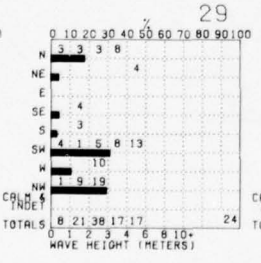
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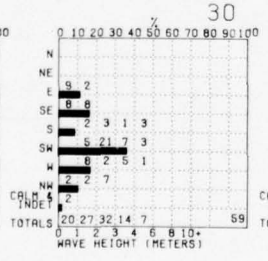


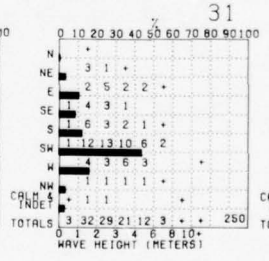


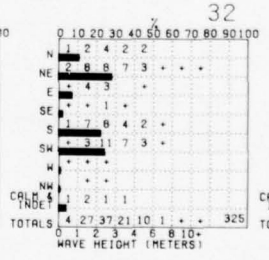


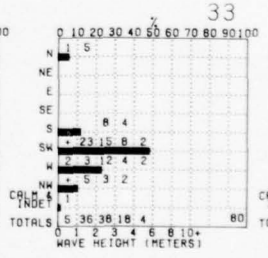






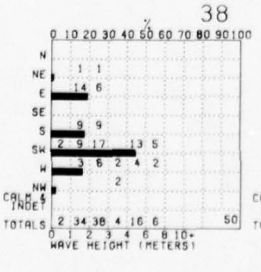


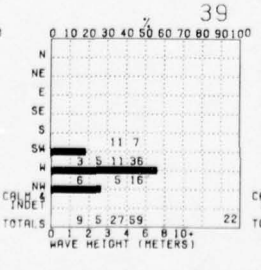


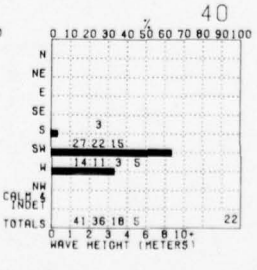


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INSUFFICIENT DATA

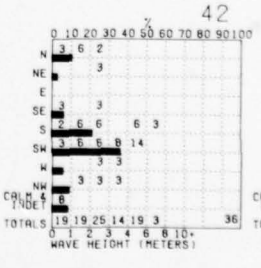




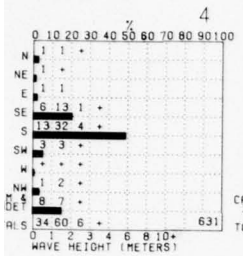


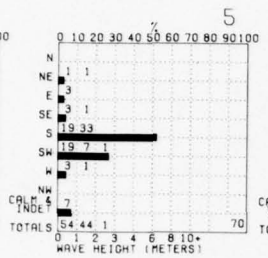
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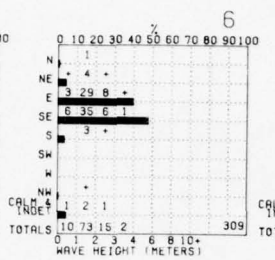
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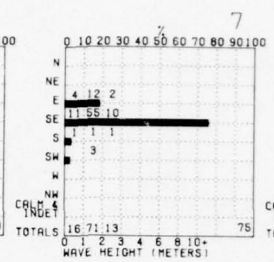


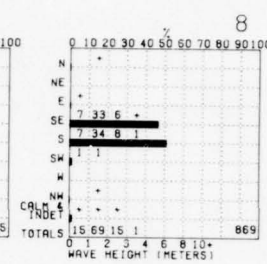
Graphs represent the objective compilation of available data for specified areas without regard to sus
The isopleth analyses (opposite page) are based on all available data subjectively adjusted where bia

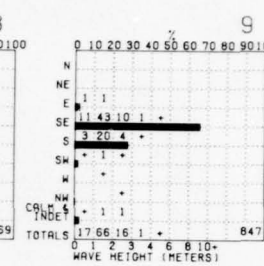


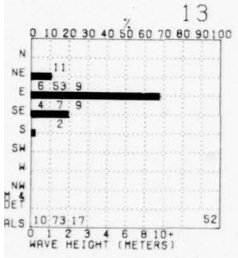






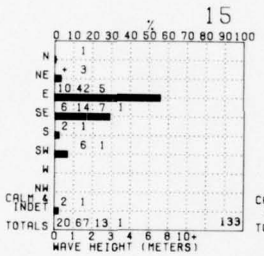


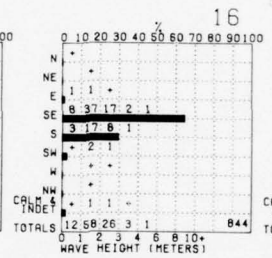


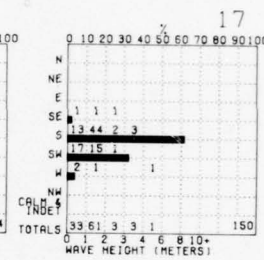


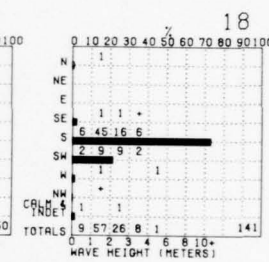
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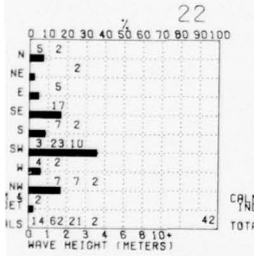
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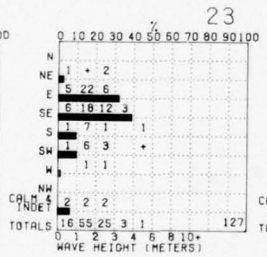


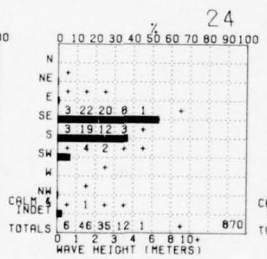


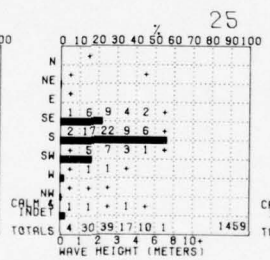


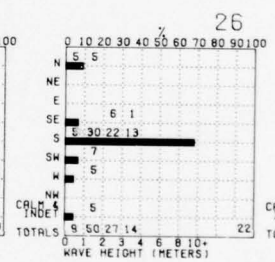


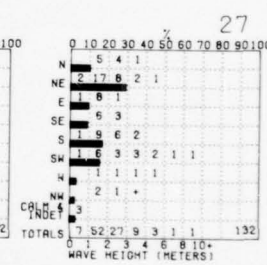


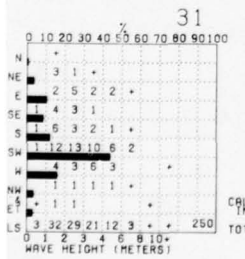


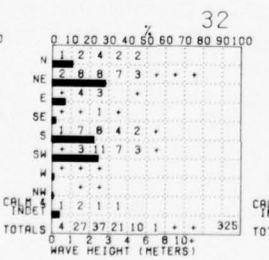


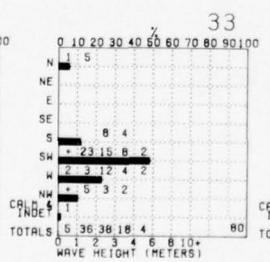


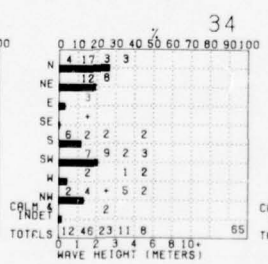


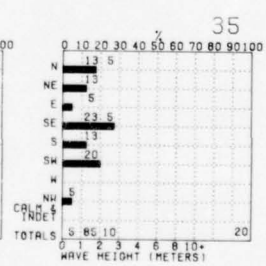






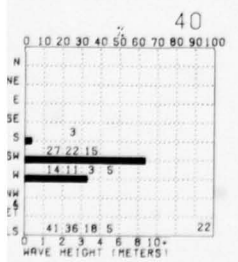






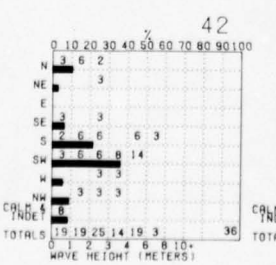
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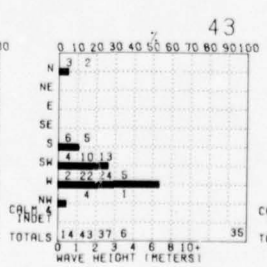
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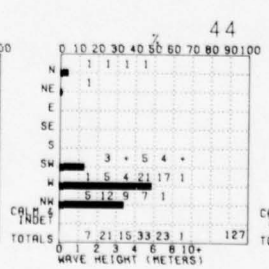


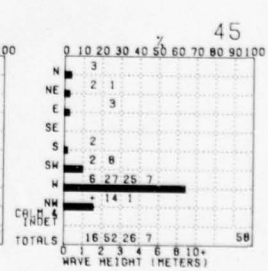
41

INSUFFICIENT DATA









objective compilation of available data for specified areas without regard to suspected biases.
(opposite page) are based on all available data subjectively adjusted where bias was evident.

DECEMBER

PERIOD (Seconds)

HEIGHT METERS	5-6	7-8	9-10	10-11	12-13	>13	AND
0-1	21	3	1	+	+	+	6
1-1.5	22	16	6	2	1	+	+
2-2.5	3	6	4	3	1	+	+
3-3.5	+	1	1	1	1	+	+
4-5.5	+	+	+	+	+	+	0
6-7.5	0	+	+	0	0	+	0
8-9.5	0	0	0	+	0	0	0
>10	0	0	0	0	0	+	0

4010

Percent frequency of occurrence of wave period and height.

(2% of observed waves had a height of 1-1.5 meters and a period of 10-11 seconds.)

+ indicates < 5% but > 0.

Number of observations.

Waves are selected on the basis of the higher of sea and swell when both are reported. If both heights are equal, the wave with the longer period is selected.

BLUE LINE - Percent frequency of wave height ≥3.5 meters (12 feet)

RED LINE - Percent frequency of wave height ≥6 meters (20 feet)

WAVES (≥3.5 AND ≥6 METERS)



WAVE PERIOD AND HEIGHT

1

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	+	0	0	0	1
1-1.5	29	26	7	1	+	0	3
2-2.5	3	7	8	2	+	+	1
3-3.5	1	1	1	0	0	1	+
4-5.5	0	0	1	0	0	+	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

300

2

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	+	0	0	0	0	8
1-1.5	19	19	8	+	1	0	13
2-2.5	1	5	2	2	0	0	1
3-3.5	0	1	0	+	0	0	0
4-5.5	0	0	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

221

3

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	19	3	0	2	0	0	2
1-1.5	29	28	7	2	0	0	3
2-2.5	3	0	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

58

4

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	3	1	1	0	0	15
1-1.5	20	18	6	2	2	+	9
2-2.5	3	2	1	+	0	+	+
3-3.5	0	+	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

662

5

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	7	1	2	0	0	30
1-1.5	12	9	7	9	0	0	1
2-2.5	1	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

81

10

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	24	6	8	0	0	0	6
1-1.5	22	20	4	0	3	1	5
2-2.5	1	1	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

11

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	1	0	0	0	5
1-1.5	18	22	14	4	1	0	3
2-2.5	3	7	5	3	0	0	0
3-3.5	0	0	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

118

12

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	2	+	+	0	0	4
1-1.5	31	20	6	2	1	+	6
2-2.5	2	4	3	+	0	+	+
3-3.5	0	+	+	+	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

865

13

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	0
1-1.5	36	30	2	0	0	2	2
2-2.5	2	13	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

53

14

INSUFFICIENT DATA

PERIOD (SECOND

HEIGHT (MTRS)	<6	6-	8-	10-	12-	>13
0-.5	17	2	1	0	0	
1-1.5	38	19	4	1	3	
2-2.5	4	4	2	0	1	
3-3.5	1	0	0	0	0	
4-5.5	0	0	0	0	0	
6-7.5	0	0	0	0	0	
8-9.5	0	0	0	0	0	
≥10	0	0	0	0	0	

19

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	2	0	0	0	0	2
1-1.5	27	21	6	1	1	0	3
2-2.5	3	18	4	1	0	0	2
3-3.5	1	3	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

175

20

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	1	0	0	0	0	2
1-1.5	23	28	10	2	0	0	1
2-2.5	2	16	7	2	0	0	0
3-3.5	0	1	0	0	0	0	0
4-5.5	0	0	2	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

116

21

INSUFFICIENT DATA

22

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	2
1-1.5	24	14	14	7	0	2	0
2-2.5	5	10	5	2	0	0	0
3-3.5	0	0	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

42

23

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	0	0	0	0	0	2
1-1.5	26	18	7	1	0	1	2
2-2.5	3	11	6	2	2	0	2
3-3.5	1	0	2	0	0	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

131

28

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	0
1-1.5	5	5	0	0	0	0	0
2-2.5	0	0	0	5	5	0	0
3-3.5	0	0	16	16	5	0	11
4-5.5	0	0	11	0	0	0	0
6-7.5	0	0	11	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

19

29

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	4	0	0	0	0
1-1.5	8	8	4	0	0	0	0
2-2.5	4	8	13	4	4	0	4
3-3.5	0	0	17	0	0	0	0
4-5.5	0	0	4	4	0	8	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

24

30

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	2	0	0	0	0	2
1-1.5	8	10	7	0	2	0	0
2-2.5	2	3	7	14	5	2	0
3-3.5	0	0	3	10	0	0	0
4-5.5	0	0	3	2	0	2	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

59

31

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	2
1-1.5	14	10	4	2	0	0	2
2-2.5	4	11	6	5	1	+	2
3-3.5	2	6	8	2	1	0	1
4-5.5	+	+	6	4	1	0	+
6-7.5	0	+	1	+	+	+	0
8-9.5	0	0	0	0	0	0	+
≥10	0	0	0	0	+	0	0

252

32

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	0	+	0	0	2
1-1.5	10	8	3	+	+	0	6
2-2.5	6	13	10	5	1	1	2
3-3.5	1	6	9	1	1	0	3
4-5.5	1	3	3	1	2	+	0
6-7.5	0	1	0	0	+	+	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	+	0

326

37

INSUFFICIENT DATA

38

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	0
1-1.5	0	4	26	4	0	0	0
2-2.5	0	6	14	18	0	0	0
3-3.5	0	0	0	0	4	0	0
4-5.5	0	0	0	8	8	0	0
6-7.5	0	0	0	0	6	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

50

39

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	0	9	0	0	0	0
2-2.5	0	5	0	0	0	0	0
3-3.5	0	9	5	5	9	0	0
4-5.5	0	14	5	18	18	0	5
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

40

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	9	27	5	0	0	0
2-2.5	0	0	23	5	9	0	0
3-3.5	0	0	5	14	0	0	0
4-5.5	5	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

41

INSUFFICIENT DATA

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-	8-	10-	12-	>13
0-.5	11	0	0	0	0	
1-1.5	11	3	3	0	3	
2-2.5	11	3	8	3	0	
3-3.5	3	3	0	6	0	
4-5.5	0	11	0	6	3	
6-7.5	0	3	0	0	0	
8-9.5	0	0	0	0	0	
≥10	0	0	0	0	0	

Graphs represent the objective compilation of available data for specified areas without rega
The isopleth analyses (opposite page) are based on all available data subjectively adjusted w

IGHT

DECEMBER

PERIOD (SECONDS)

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	3	1	1	0	0	15
1-1.5	20	18	6	2	2	+	9
2-2.5	3	2	1	+	0	+	+
3-3.5	0	+	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

662

5

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	20	7	1	2	0	0	30
1-1.5	12	9	7	9	0	0	1
2-2.5	1	0	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

81

6

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	8	+	0	0	0	0	2
1-1.5	29	26	4	2	1	0	12
2-2.5	3	6	2	1	1	0	2
3-3.5	0	1	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

311

7

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	3	1	0	0	0	0
1-1.5	45	21	0	1	1	1	0
2-2.5	3	11	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

76

8

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	2	+	+	0	0	2
1-1.5	31	19	7	3	2	+	6
2-2.5	4	6	3	+	+	+	+
3-3.5	+	+	1	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

880

9

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	13	1	+	1	0	0	3
1-1.5	31	16	6	3	3	1	7
2-2.5	3	5	3	2	1	+	1
3-3.5	+	1	+	+	+	0	0
4-5.6	+	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

862

12

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	4
1-1.5	+	+	+	0	0	0	6
2-2.5	+	+	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

865

13

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	0
1-1.5	36	30	2	0	0	2	2
2-2.5	2	13	2	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

53

14

INSUFFICIENT DATA

15

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	17	2	1	0	0	0	1
1-1.5	38	19	4	1	3	0	1
2-2.5	4	4	2	0	1	0	0
3-3.5	1	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

136

16

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	2	1	+	0	0	3
1-1.5	26	15	7	2	2	1	5
2-2.5	6	8	5	3	1	+	2
3-3.5	+	1	1	+	+	0	+
4-5.5	+	+	+	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

846

17

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	25	5	2	1	0	0	1
1-1.5	13	23	13	3	5	0	5
2-2.5	1	1	1	0	1	0	0
3-3.5	1	2	0	0	0	0	0
4-5.5	0	0	0	1	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

152

18

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	7	1	0	0	0	0	3
1-1.5	21	17	7	6	2	0	2
2-2.5	2	9	9	2	1	0	2
3-3.5	0	1	4	0	2	0	0
4-5.5	0	1	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

145

21

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	12	0	0	0	0	0	2
1-1.5	24	14	14	7	0	2	0
2-2.5	5	10	5	2	0	0	0
3-3.5	0	0	2	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

42

22

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	16	0	0	0	0	0	2
1-1.5	26	18	7	1	0	1	2
2-2.5	3	11	6	2	2	0	2
3-3.6	1	0	2	0	0	0	0
4-5.5	0	0	1	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

131

23

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	+	+	+	0	0	2
1-1.5	17	14	7	2	2	+	5
2-2.5	5	12	8	5	1	1	3
3-3.6	1	4	3	2	1	+	1
4-5.5	+	+	+	+	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	+	0	0	+	0
≥10	0	0	0	0	0	0	0

871

24

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	3	+	+	+	0	0	1
1-1.5	10	9	5	2	1	0	3
2-2.5	7	13	11	3	1	1	3
3-3.6	2	5	4	3	1	1	1
4-5.5	+	2	3	2	1	+	+
6-7.5	0	+	+	+	+	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

1465

25

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	0
1-1.5	0	41	5	0	0	0	5
2-2.5	5	14	9	0	0	0	0
3-3.5	0	0	9	0	5	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

26

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	4
1-1.5	18	16	5	0	6	0	6
2-2.5	4	10	6	4	0	1	1
3-3.5	0	2	4	0	0	0	2
4-5.5	0	2	0	0	0	0	1
6-7.5	0	0	0	0	0	0	1
8-9.5	0	0	0	0	0	1	0
≥10	0	0	0	0	0	0	0

134

27

30

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	0	0	0	0	0	2
1-1.5	14	10	4	2	0	0	2
2-2.5	4	11	6	5	1	+	2
3-3.5	2	6	8	2	1	0	1
4-5.5	+	+	6	4	1	0	+
6-7.6	0	+	1	+	+	+	0
8-9.5	0	0	0	0	0	0	+
≥10	0	0	0	0	0	+	0

252

31

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	2	+	0	+	0	0	2
1-1.5	10	8	3	+	+	0	6
2-2.5	6	13	10	5	1	1	2
3-3.5	1	6	9	1	1	0	3
4-5.5	1	3	3	1	2	+	0
6-7.5	0	1	0	0	+	+	0
8-9.5	0	0	0	0	0	+	0
≥10	0	0	0	0	0	0	0

326

32

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	4	0	0	0	0	0	1
1-1.5	8	13	6	9	0	0	1
2-2.5	6	13	9	8	3	0	0
3-3.6	1	3	5	4	4	1	0
4-5.5	0	0	0	0	3	1	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

80

33

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	14	0	0	0	0	0	0
1-1.5	17	23	3	0	2	0	2
2-2.5	5	11	3	2	2	0	2
3-3.6	2	2	0	5	2	0	2
4-5.5	2	2	2	2	0	0	2
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

66

34

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	5	0	0	0	0	0	0
1-1.5	10	30	25	20	0	0	0
2-2.5	0	10	0	0	0	0	0
3-3.5	0	0	0	0	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

20

35

INSUFFICIENT DATA

36

39

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	9	27	5	0	0	0
2-2.5	0	0	23	5	9	0	0
3-3.5	0	0	5	14	0	0	0
4-5.5	5	0	0	0	0	0	0
6-7.6	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

22

40

INSUFFICIENT DATA

41

42

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	11	0	0	0	0	0	8
1-1.5	11	3	3	0	3	0	0
2-2.5	11	3	8	3	0	0	0
3-3.5	3	3	0	6	0	0	3
4-5.5	0	11	0	6	3	0	0
6-7.5	0	3	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

36

43

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	9	0	0	0	0	0	6
1-1.5	23	17	0	0	0	0	3
2-2.5	23	9	3	0	0	0	3
3-3.5	0	3	0	3	0	0	0
4-5.5	0	0	0	0	0	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

35

44

HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	0	3	4	0	0	0	0
2-2.5	2	2	15	3	0	0	0
3-3.5	1	0	9	5	1	0	0
4-5.5	0	0	6	18	9	0	0
6-7.5	0	0	1	6	9	6	0
8-9.5	0	0	0	1	0	0	0
≥10	0	0	0	0	0	0	0

127

45

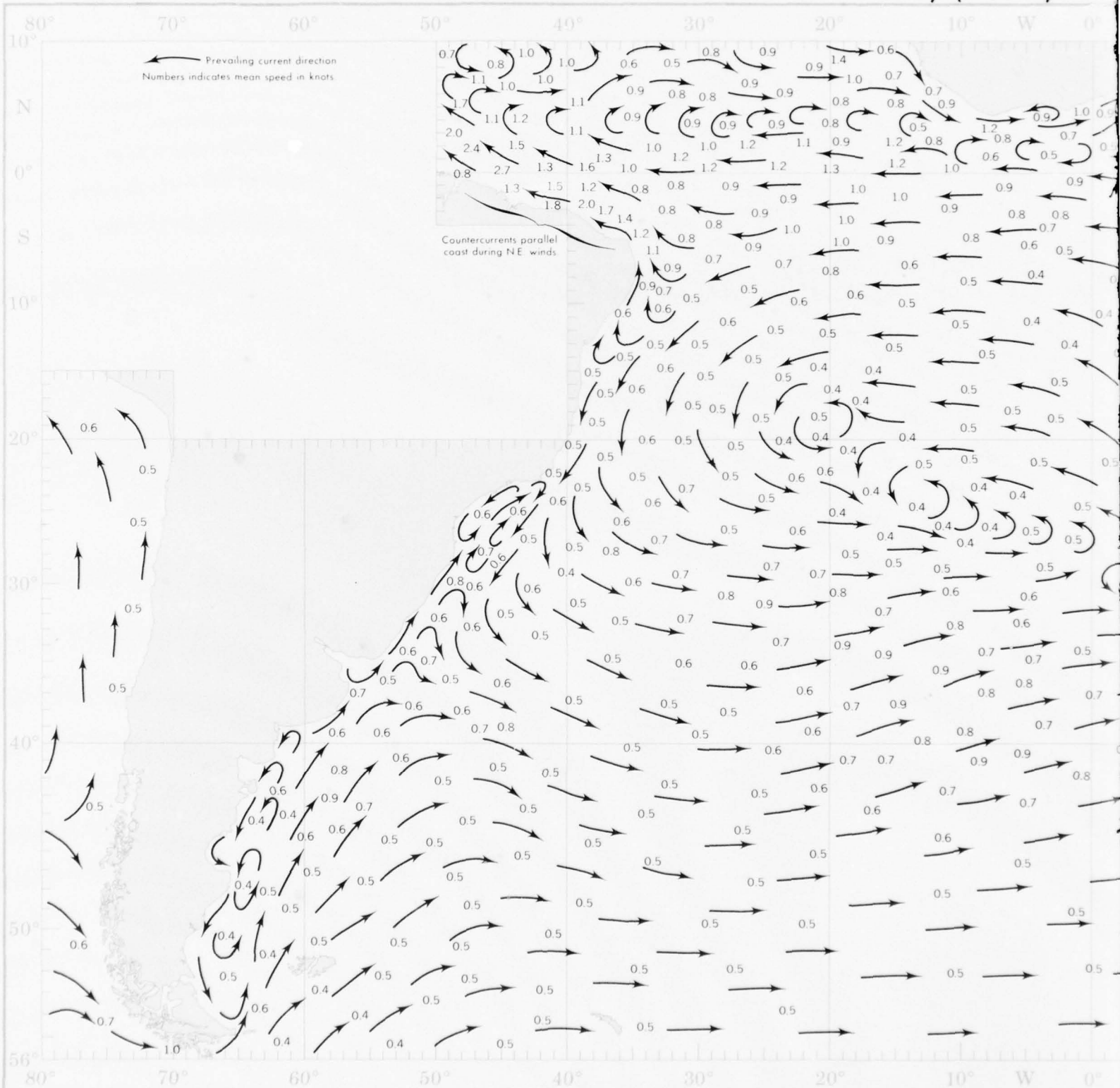
HEIGHT (MTRS)	<6	6-7	8-9	10-11	12-13	>13	IND
0-.5	0	0	0	0	0	0	0
1-1.5	3	0	7	3	0	0	2
2-2.5	2	17	14	3	2	9	5
3-3.6	0	2	3	14	2	2	3
4-5.5	0	2	0	2	3	0	0
6-7.5	0	0	0	0	0	0	0
8-9.5	0	0	0	0	0	0	0
≥10	0	0	0	0	0	0	0

58

esent the objective compilation of available data for specified areas without regard to suspected biases.
analyses (opposite page) are based on all available data subjectively adjusted where bias was evident.

PART II OCEANOGRAPHY

FIG. 1 PREVAILING SURFACE CURRENTS WINTER, (JULY, AU



ACE CURRENTS WINTER, (JULY, AUGUST, SEPTEMBER)

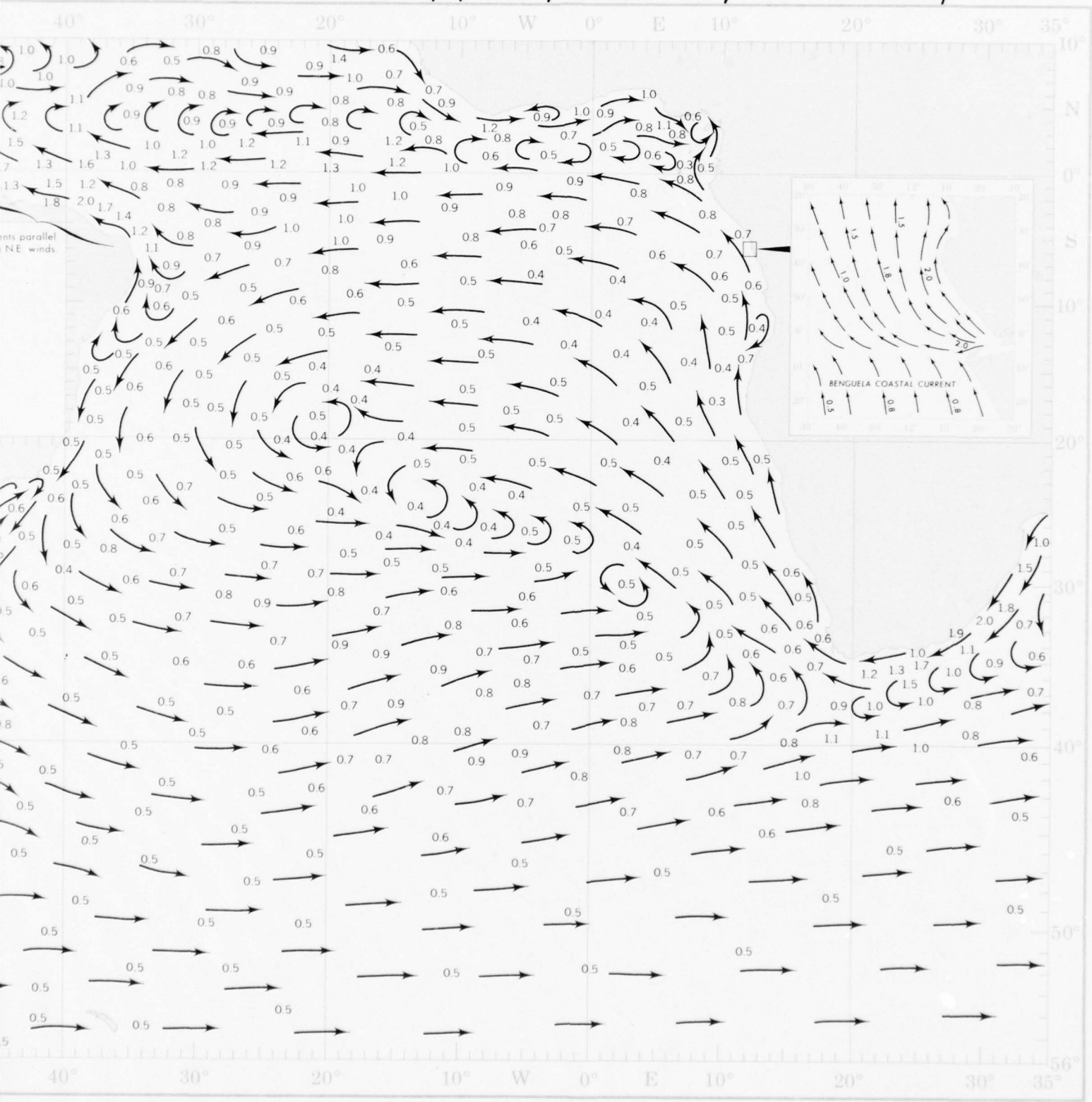
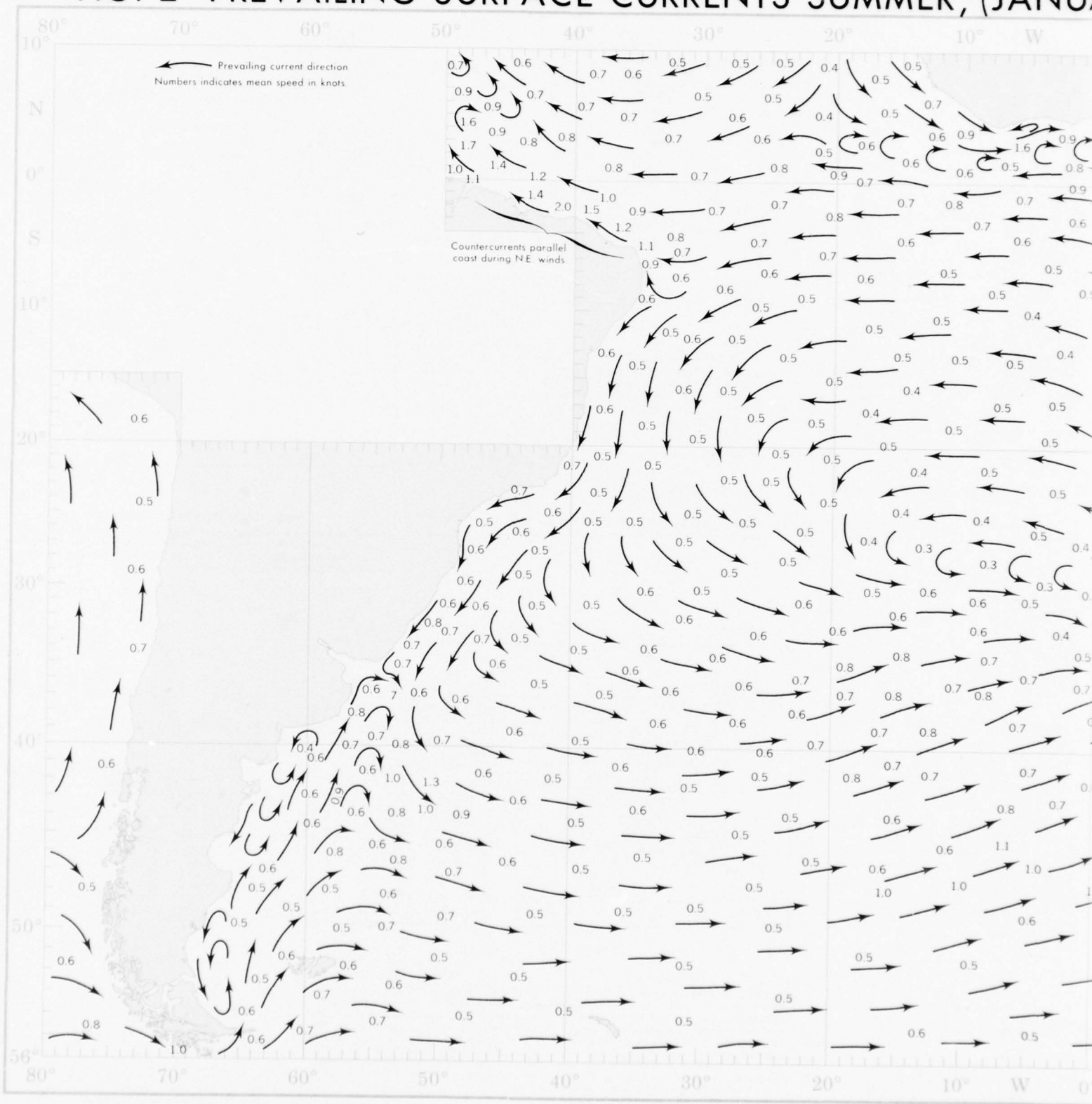


FIG. 2 PREVAILING SURFACE CURRENTS SUMMER, (JANU



FACE CURRENTS SUMMER, (JANUARY, FEBRUARY, MARCH)

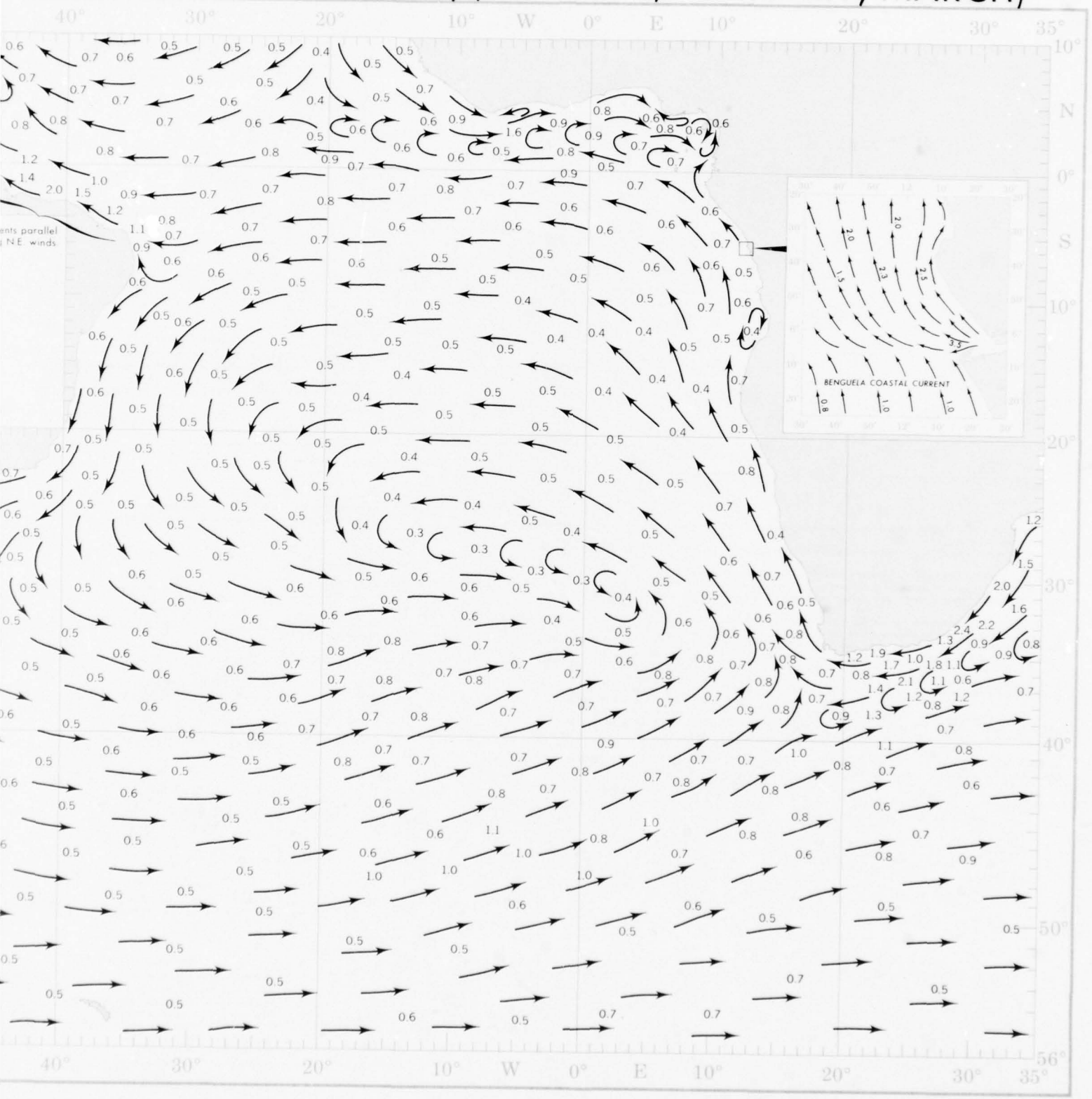
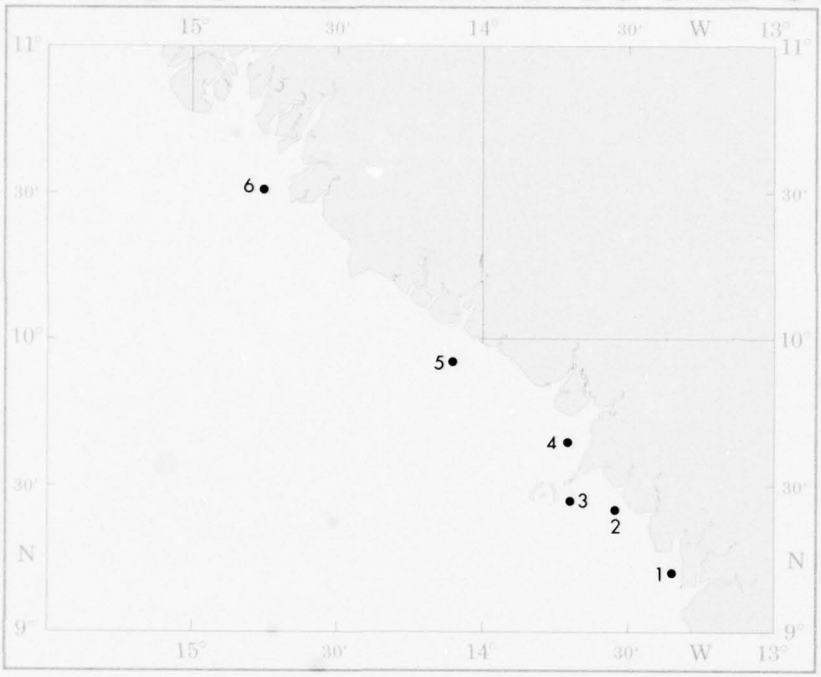


FIG. 3 TIDAL AND LOCAL CURRENTS



1. In the vicinity of the rocks about 2 miles above the entrance to Riviere Forecariah the ebb is very strong and causes dangerous overfalls.
2. In the entrance to the Riviere Soumbouya the tidal currents follow the direction of the passage. The ebb is very strong.
3. Off Ile Rooma the flood sets northeast and the ebb southwest at speeds of 1.2 to 1.5 knots.

In Grande Passe, near the southwest tip of Conakry, the flood sets northwest and the ebb southeast. In the entrance to the port the flood sets northeast at speeds as high as 2.7 knots and the ebb southwest, occasionally at speeds greater than 3.0 knots.

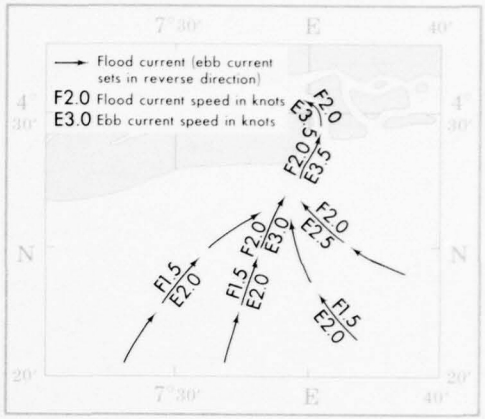
Off Conakry, the tidal currents are irregular. The flood sets north at a maximum speed of 2.0 knots at the entrance and northeast in the harbor basin at a slightly greater speed from 2 to 4 hours after low water. The ebb sets in the opposite direction at speeds of about 1.5 knots in the harbor and about 2.2 knots in the entrance from about 1 hour 15 minutes to 4 hours 15 minutes after high water. Off the end of the wharf the sea is very choppy when the ebb is strong.

North of Ile De Kassa, in Passe Du Nord, the currents are very strong and cause overfalls even in depths of 5 fathoms.

4. At the entrance to Baie De Sangarea, the flood sets northeast. On the rivers leading inland from the head of the bay the flood currents average 2.0 to 2.5 knots and the ebb even stronger. Slack water is of short duration.
5. Off Rio Pongo the current may set northeast for several days at a time during October and November.

The tidal currents are strong in the bend west of Gondoli Fandi. In Barre De Sable the flood sets north-northeast across the channel and the ebb southwest, sweeping obliquely toward the bank on the south side of the channel. In Barre De Vase the flood sets northeast and the ebb south-southwest. The speed varies from 1.5 to 3.0 knots after heavy rains.

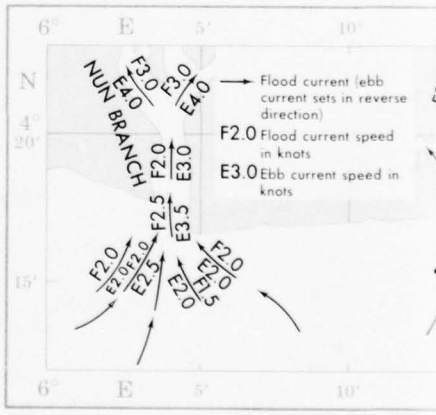
6. At the entrance to Rio Nunez the flood generally sets northeast and the ebb in the opposite direction. They both attain a maximum speed of 3.0 knots. Upriver from Victoria the tidal currents are very strong.



OPOBO RIVER

The flood current begins 4 1/4 hours before high water and runs 5 hours; the ebb current begins 1 1/2 hours after high water and runs 5 hours. Slack before ebb occurs 3/4 hour after high water and lasts 3/4 hour; slack before flood occurs 1 hour after low water and lasts 1 hour.

Currents in the vicinity of Opobo, New Calabar, River Bonny, Nun Branch and River Brass Rivers at springs during the dry season.

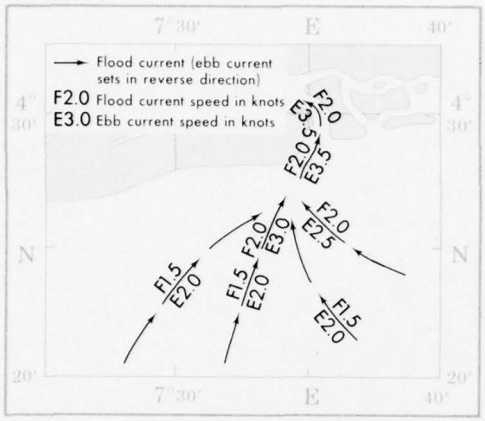


NUN BRANCH

At Akassa the flood current begins 4 1/4 hours before high water and runs for 5 1/4 hours; the ebb begins 1 3/4 hours after high water and runs for 5 1/4 hours. Slack before ebb occurs 1 hour after high water and lasts for 3/4 hour; slack before flood occurs 1 hour after low water and lasts for 3/4 hour. At spring tides in December the ebb current runs for 8 hours at a rate of 4 to 5 knots. In the rainy season there is a current of 4 to 5 knots along the wharves of Akassa.

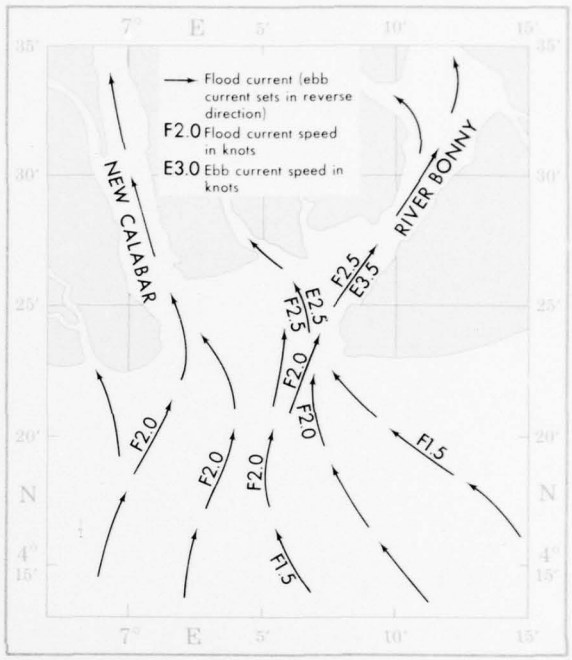
The flood c
high water
rent begins
5 1/4 hours
high water
occurs 3/4
hour. At sp
ebb current

AL CURRENTS



OPOBO RIVER

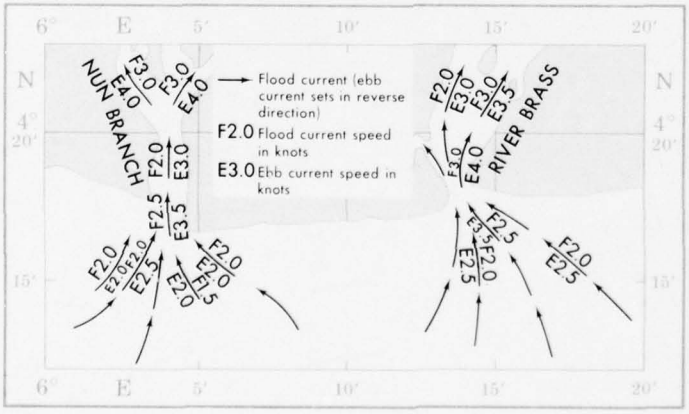
The flood current begins 4 1/4 hours before high water and runs 5 hours; the ebb current begins 1 1/2 hours after high water and runs 5 hours. Slack before ebb occurs 3/4 hour after high water and lasts 3/4 hour; slack before flood occurs 1 hour after low water and lasts 1 hour.



Currents in the vicinity of Opobo, New Calabar, River Bonny, Nun Branch and River Brass Rivers at springs during the dry season.

NEW CALABAR RIVER AND RIVER BONNY

At the River Bonny bar the flood current begins 5 1/2 hours before high water and runs for 6 hours; the ebb current begins 1 hour after high water and runs for 5 hours. Slack before ebb occurs 1/2 hour after high water and lasts 1/2 hour; slack before flood occurs at low water and lasts 1/2 hour.



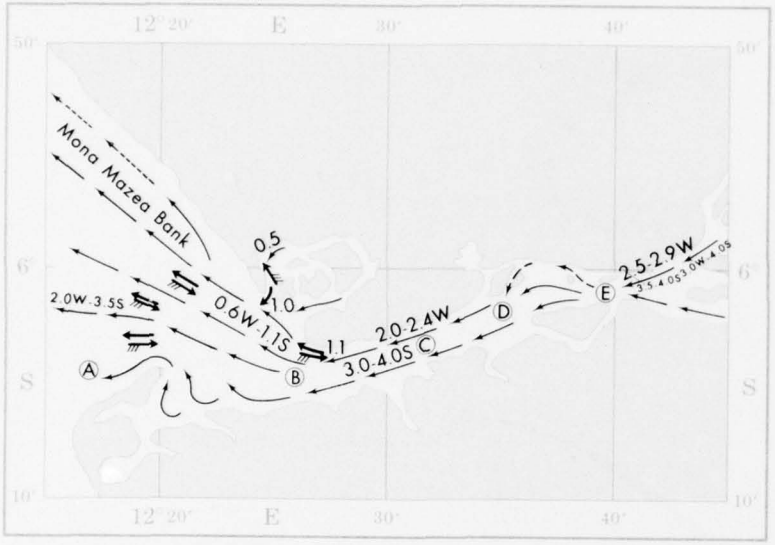
NUN BRANCH

At Akassa the flood current begins 4 1/4 hours before high water and runs for 5 1/4 hours; the ebb begins 1 3/4 hours after high water and runs for 5 1/4 hours. Slack before ebb occurs 1 hour after high water and lasts for 3/4 hour; slack before flood occurs 1 hour after low water and lasts for 3/4 hour. At spring tides in December the ebb current runs for 8 hours at a rate of 4 to 5 knots. In the rainy season there is a current of 4 to 5 knots along the wharves of Akassa.

RIVER BRASS

The flood current begins 4 3/4 hours before high water and runs 5 3/4 hours; the ebb current begins 1 1/2 hours after high water and runs 5 1/4 hours. Slack before ebb occurs 1 hour after high water and lasts 1/2 hour; slack before flood occurs 3/4 hour after low water and lasts 1/2 hour. At spring tide during the rainy season the ebb current attains a speed of 5 1/2 knots.

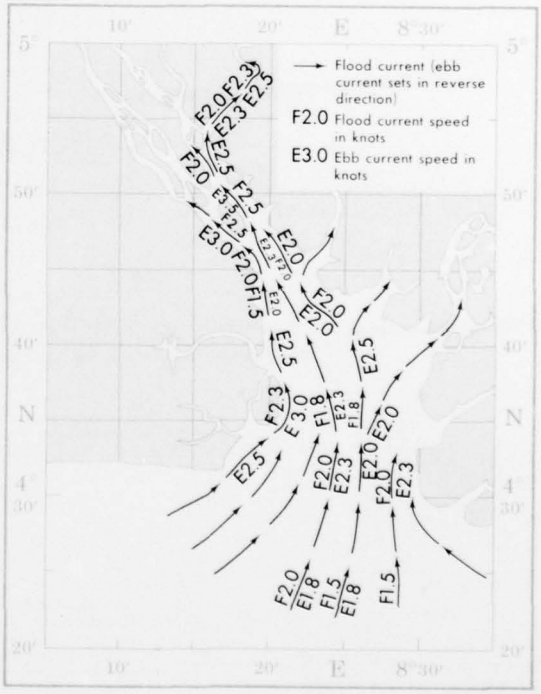
FIG. 3 TIDAL AND LOCAL CURRENTS (Cont'd)



A. River current slackens at times of tidal flood strengths.
B. River current is about 1 2 fathom deep.
C. Subsurface flood and ebb currents range from nil to about 0.5 knots.
D. River current is about 3 to 5 fathoms deep.
E. River current extends to the bottom and is particularly strong at strength of ebb.

Tidal Currents	River Currents
Flood strength	Strong
Ebb strength	Moderate
	Weak

W.-Southern winter speed.
S.-Southern summer speed.

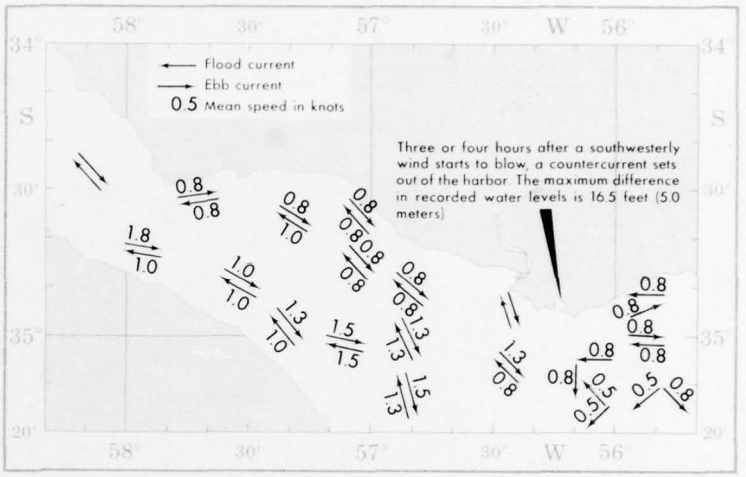


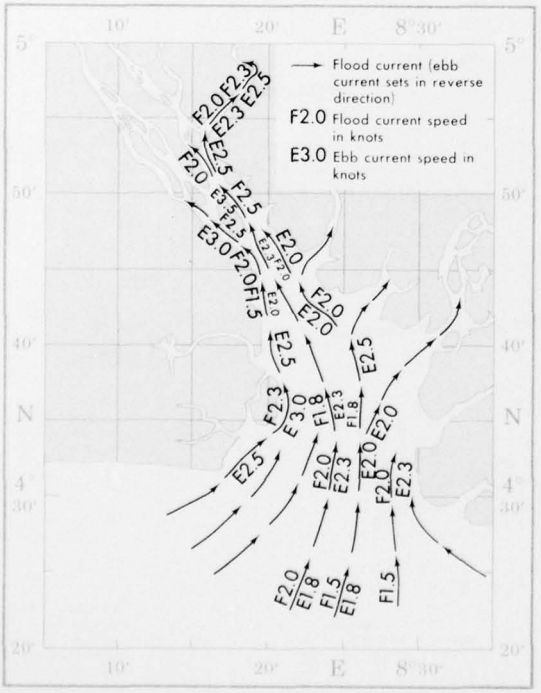
CALABAR RIVER

During the dry season (December through early March) the flood throughout the river as far as Calabar begins 4 1 2 hours before high water and runs for 5 hours, attaining its greatest velocity 2 3 4 hours before high water. During the ebb the current begins 1 1 2 hours after high water and runs 5 3 4 hours, attaining its greatest velocity 4 1 4 hours after high water. Slack before ebb lasts for 1 2 to 1 hour, slack before flood 1 4 to 3 4 hour.

Currents in the vicinity of Calabar River at springs during the dry season.

CURRENTS (Cont'd)



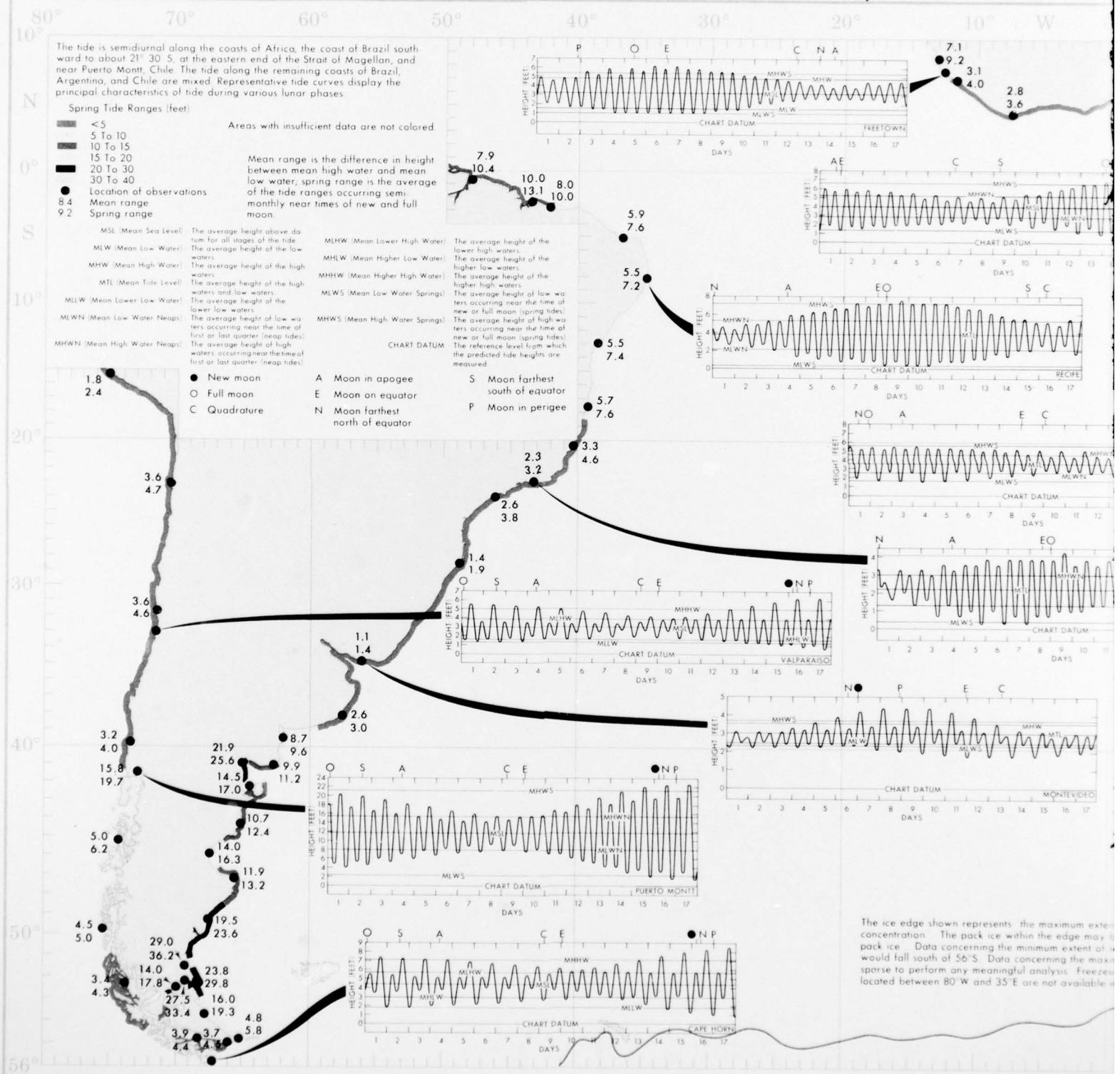


CALABAR RIVER

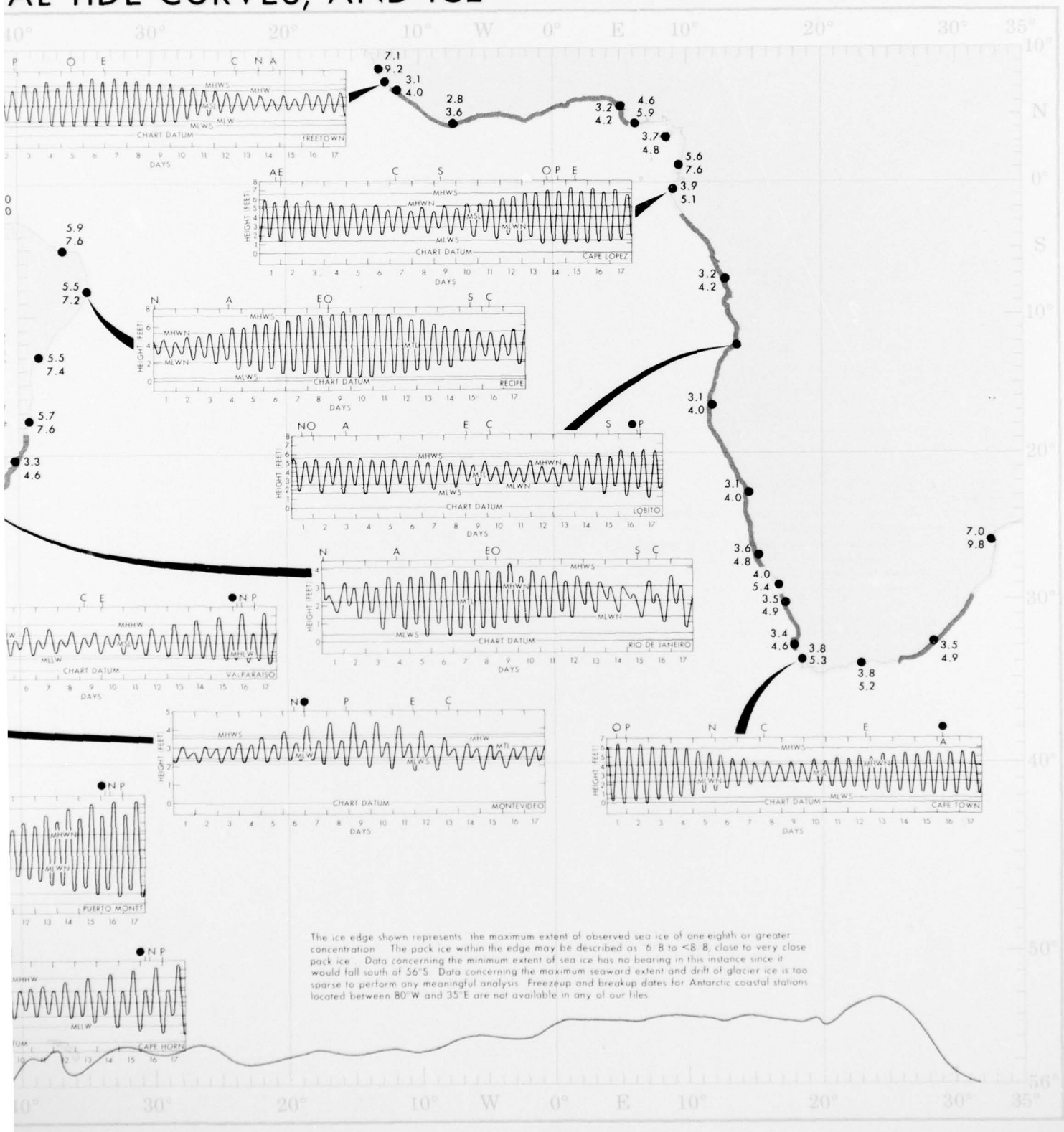
During the dry season (December through early March) the flood throughout the river as far as Calabar begins 4 1/2 hours before high water and runs for 5 hours, attaining its greatest velocity 2 3/4 hours before high water. During the ebb the current begins 1 1/2 hours after high water and runs 5 3/4 hours, attaining its greatest velocity 4 1/4 hours after high water. Slack before ebb lasts for 1 1/2 to 1 hour, slack before flood 1 1/4 to 3 1/4 hour.

Currents in the vicinity of Calabar River at springs during the dry season.

FIG. 4 TIDE RANGES, TYPICAL TIDE CURVES, AND ICE

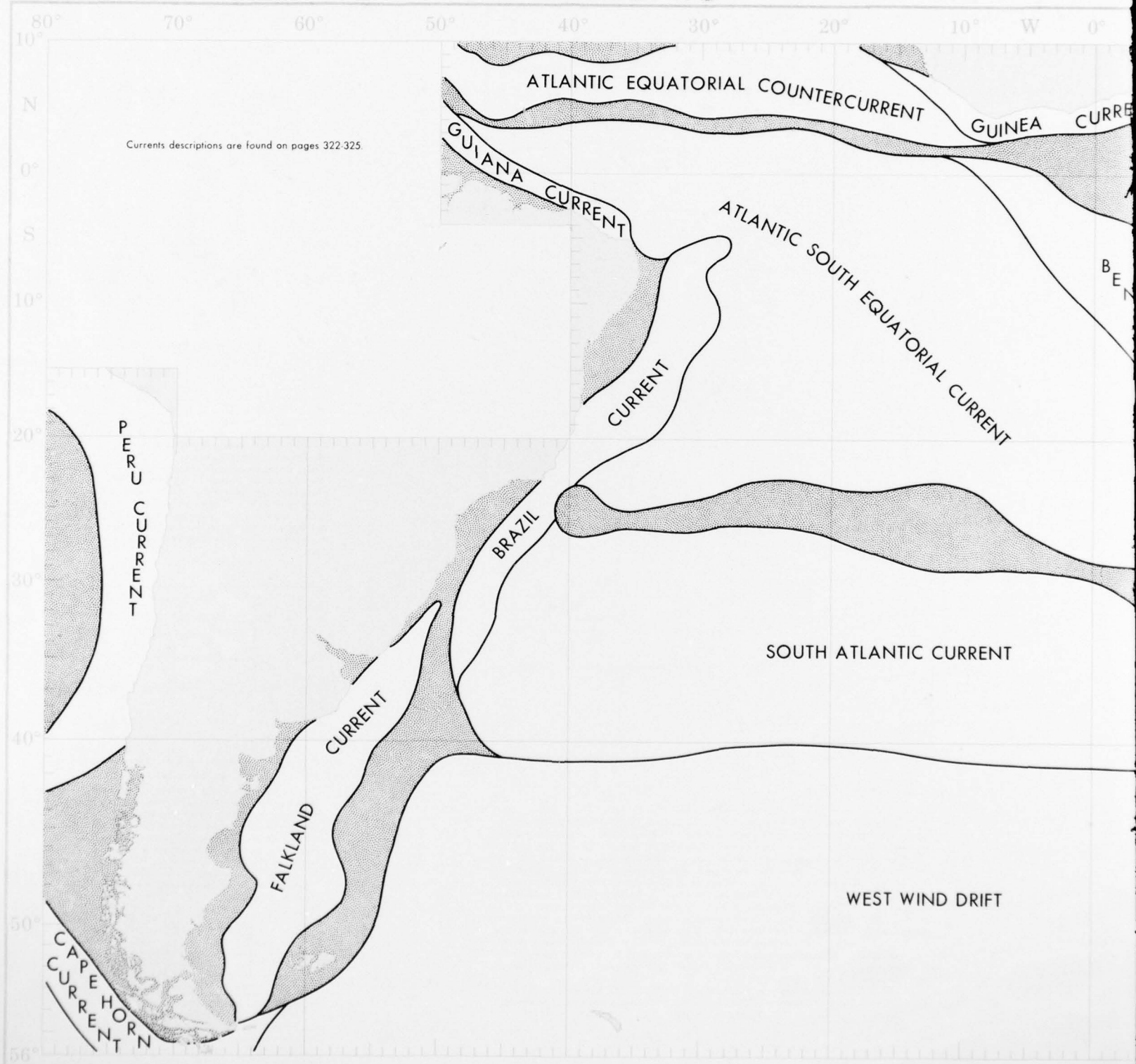


AL TIDE CURVES, AND ICE



The ice edge shown represents the maximum extent of observed sea ice of one eighth or greater concentration. The pack ice within the edge may be described as 6/8 to <8/8, close to very close pack ice. Data concerning the minimum extent of sea ice has no bearing in this instance since it would fall south of 56°S. Data concerning the maximum seaward extent and drift of glacier ice is too sparse to perform any meaningful analysis. Freezeup and breakup dates for Antarctic coastal stations located between 80° W and 35° E are not available in any of our files.

FIG. 5 MAJOR OCEANIC CURRENTS



CURRENTS

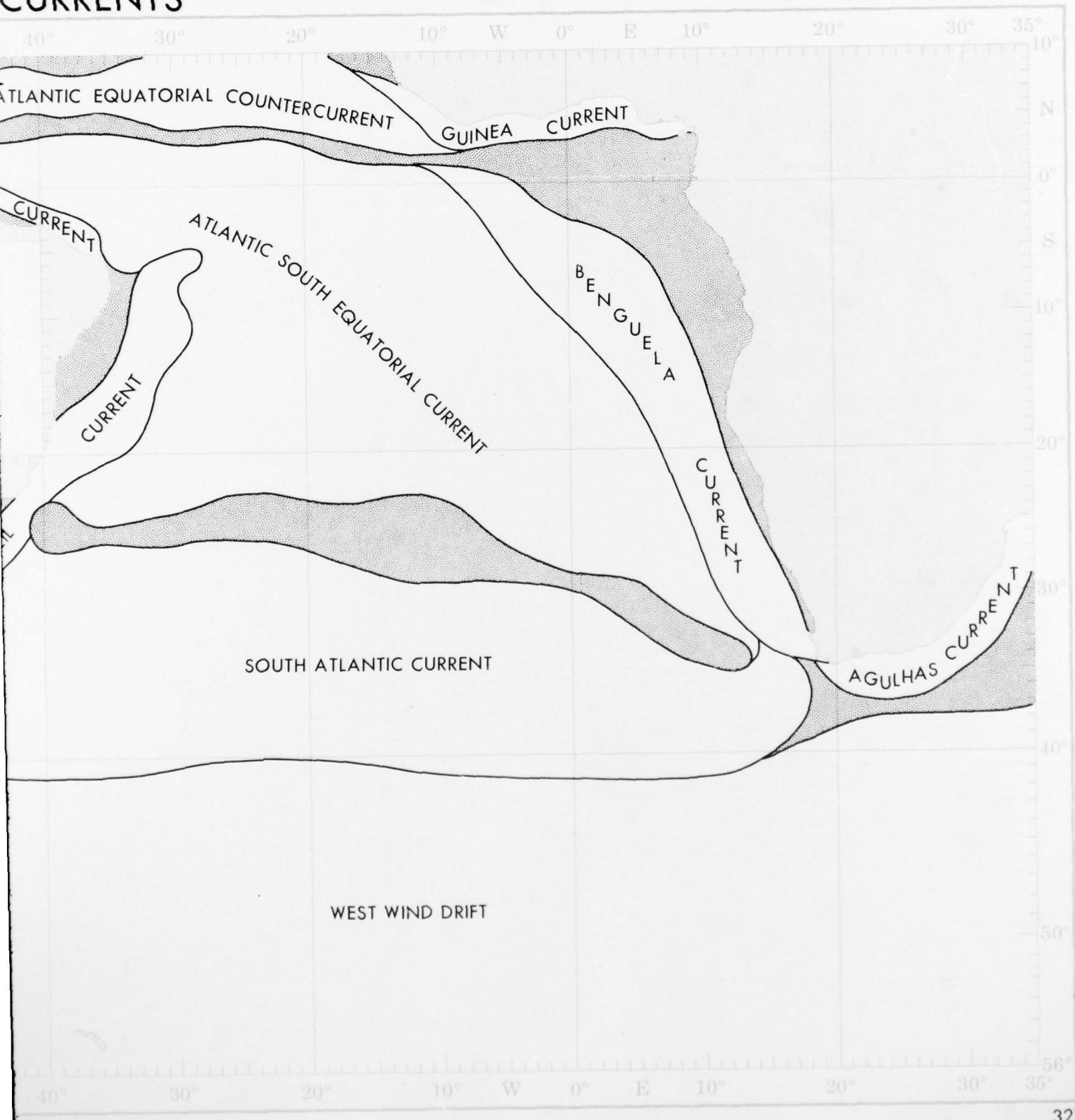
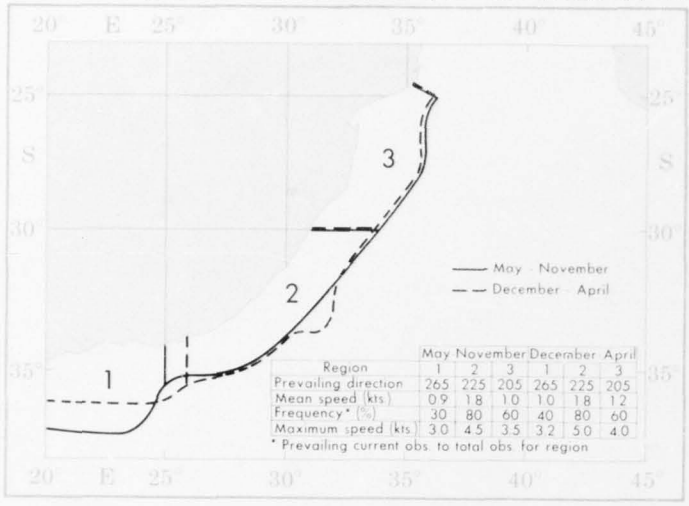
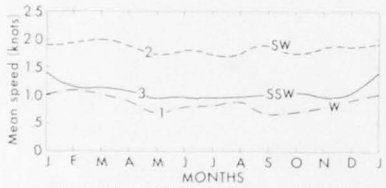

ATLANTIC EQUATORIAL COUNTERCURRENT
GUINEA CURRENT
CURRENT
ATLANTIC SOUTH EQUATORIAL CURRENT
BENGUELA
CURRENT
CURRENT
SOUTH ATLANTIC CURRENT
AGULHAS CURRENT
WEST WIND DRIFT

FIG. 5 MAJOR OCEANIC CURRENTS (Cont'd)



Region	May-November			December-April		
	1	2	3	1	2	3
Prevailing direction	265	225	205	265	225	205
Mean speed (kts)	0.9	1.8	1.0	1.0	1.8	1.2
Frequency* (%)	30	80	60	40	80	60
Maximum speed (kts)	3.0	4.5	3.5	3.2	5.0	4.0

* Prevailing current obs. to total obs. for region



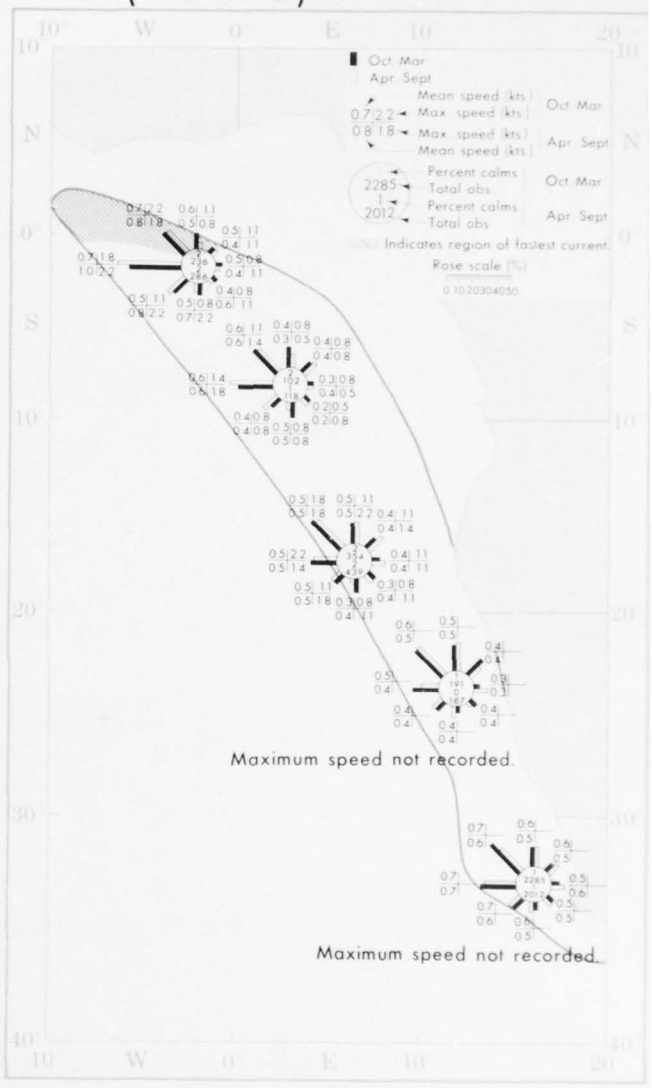
Regional monthly changes in mean speed for prevailing current direction

AGULHAS CURRENT

The Agulhas Current is a very constant coastal current that sets south and southwest along the southeast coast of Africa between 11° S. and the Cape of Good Hope. Highest speeds and greatest constancy are observed in the vicinity of the 100-fathom curve east of 28° E. within Region 2. Here, the surface current is strongest during February through April when about 17 percent of all measured speeds in the prevailing direction exceed 3 knots, particularly between 31°30' and 33°30'S., where the speed occasionally exceeds 5 knots. These maximum speeds may occur at any time but are less frequent from May through July.

The figure above also shows the slight seasonal change in the boundary of the Agulhas Current. The table shows seasonal prevailing directions, speeds, and frequencies. The graph shows mean monthly speeds of the surface current by prevailing direction for each of the three regions.

West of about 23° E., in the vicinity of Agulhas Bank, the current divides. The main part continues westward past Cape Agulhas, the second part turns counterclockwise and sets southeast under the influence of the prevailing westerly winds and part of the east-setting South Atlantic Current that flows into the Indian Ocean. In this latter region the current is weaker and more variable, as indicated by lower speeds and frequencies for Region 1. Current speeds usually do not exceed 2 knots, although speeds of 3 knots or more occasionally may be observed. Another factor which will tend to reduce the constancy of the current in Region 1 is the countercurrents between the coast and the Agulhas Current, where east and northeast sets between 0.5 and 1.5 knots may occur at irregular intervals at any time of the year.



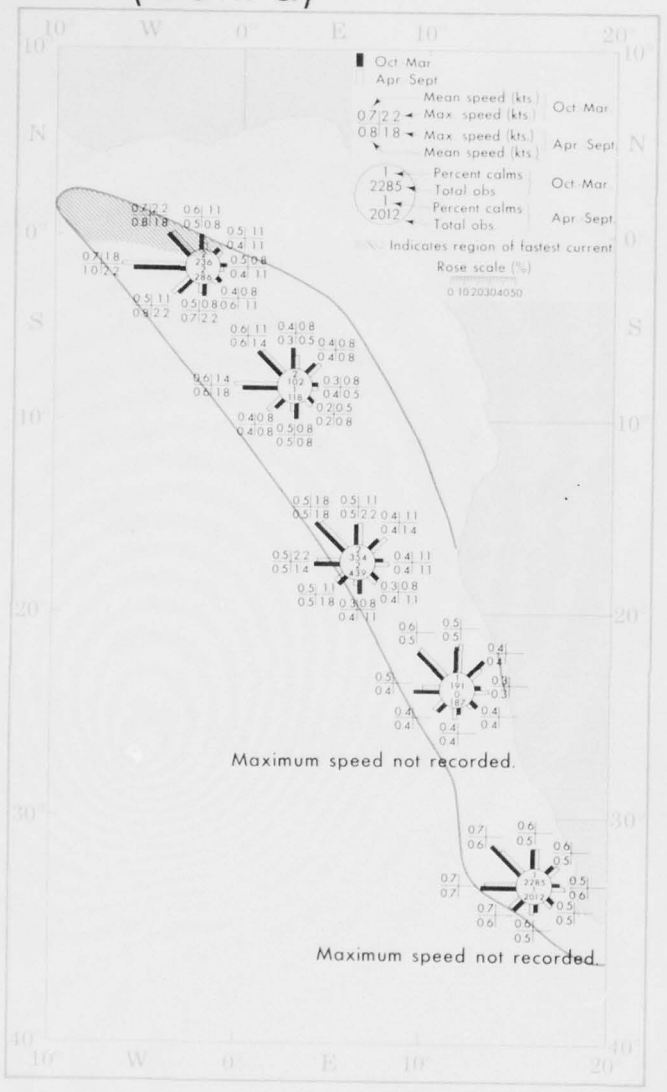
BENGUELA CURRENT

The Benguela Current, a slow-moving current caused mainly by the prevailing southeast trades, consists of a coastal part between 25° S and 0°, which shows considerable irregularity, and a fairly steady oceanic part shown in Figure above. Its boundaries change very little and it is most constant in speed and direction between Cape Agulhas and about 25° S. In this region it sets northwest about 50 percent of the time and is strongest from November through July, when speeds may reach 3 knots at about 35° S, 17° E. North of 25° S the Benguela Current is slightly more variable in speed and direction; the frequency of the prevailing northwest set falls slightly below 50 percent, particularly from August through January.

Data on winds influencing the current are few. Observations obtained during a 2-year period along the southwest African coast show a mean direction of about 169° during all seasons; the mean wind velocity did not show marked seasonal variations. Southerly winds appear more persistent with increasing distance from shore, from about 45 percent of the time within 40 miles to about 80 percent of the time 250 miles offshore, and cause significant differences between coastal and oceanic currents.

At about 25° S the current begins to widen, and the main axis is located closer to the outer boundary with the more persistent offshore winds. Near the Equator the current turns westward and joins the Atlantic South Equatorial Current.

CURRENTS (Cont'd)

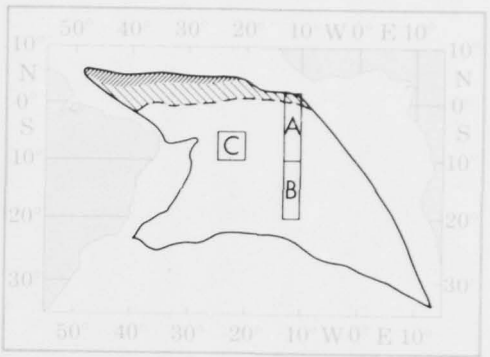


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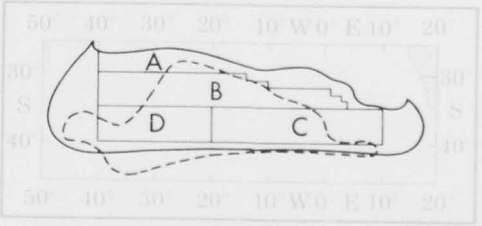
At about 25° S the current begins to widen, and the main axis is located closer to the outer boundary with the more persistent offshore winds. Near the Equator the current turns westward and joins the Atlantic South Equatorial Current.



Region	Prevailing Direction JFM	JAS	Percent Frequency JFM	JAS	Mean Speed (kts) JFM	JAS
A	285	275	60	70	0.7	0.9
B	250	260	65	65	0.6	0.6
C	270	255	75	75	0.6	0.8

ATLANTIC SOUTH EQUATORIAL CURRENT

Of the two equatorial currents in the Atlantic, the Atlantic South Equatorial Current is the stronger and more extensive. The limits of this current are shown in the figure above. The major part of the current is located south of the Equator, the central portion extending to about 20° S. The light shading shows the northern limit of the current during July, August, and September, as well as the region of fastest current, where speeds average from 1.0 to 1.5 knots. The dark shading shows how the current widens during January, February, and March, when the Atlantic Equatorial Countercurrent dissipates and is least evident. The table shows average principal seasonal variations for representative areas of the current. In Region A the flow is slightly faster and more persistent westward during the northern summer; in Region B there appears to be the least variation in speed and frequency; in Region C there is a slightly greater seasonal change in direction, speeds are higher during the northern summer, and the percent of observations setting in the prevailing direction is the same during both seasons.



—— Boundary during July and August
– – Boundary during January and February

SOUTH ATLANTIC CURRENT

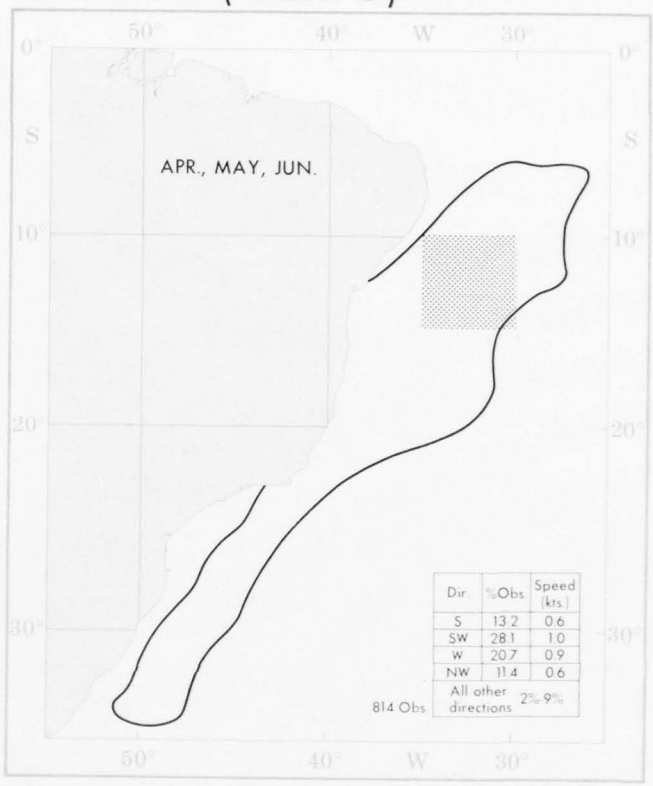
The South Atlantic Current, counterpart of the North Atlantic Current, appears to originate mainly from the Brazil Current and partly from the northernmost flow of the West Wind Drift west of 40° W. Although surface data are limited, the table shows the main features of the current during July and August in four specified regions shown in the figure above. The current is under the influence of the prevailing westerly winds; the constancy and speed increase from the northern boundary to about 40° S, where the current converges with the West Wind Drift. Maximum speed in Regions A and B is about 1.5 knots and in Region C about 2.0 knots.

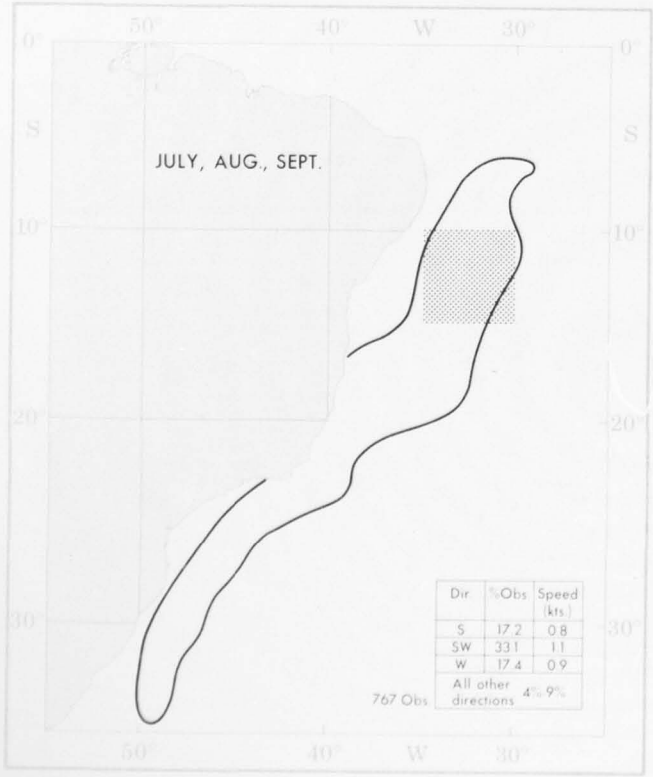
Region	Prevailing Dir	Frequency (%)	Mean Speed (Kts.)	Total Obs
A	095	45	0.5	300
B	080	50	0.6	247
C	090	55	0.7	239
D	Insufficient data; 30 of 34 observations show sets evenly distributed from 315° clockwise to 135°, with a resultant flow of 045° at a mean speed of 0.6 knot.			

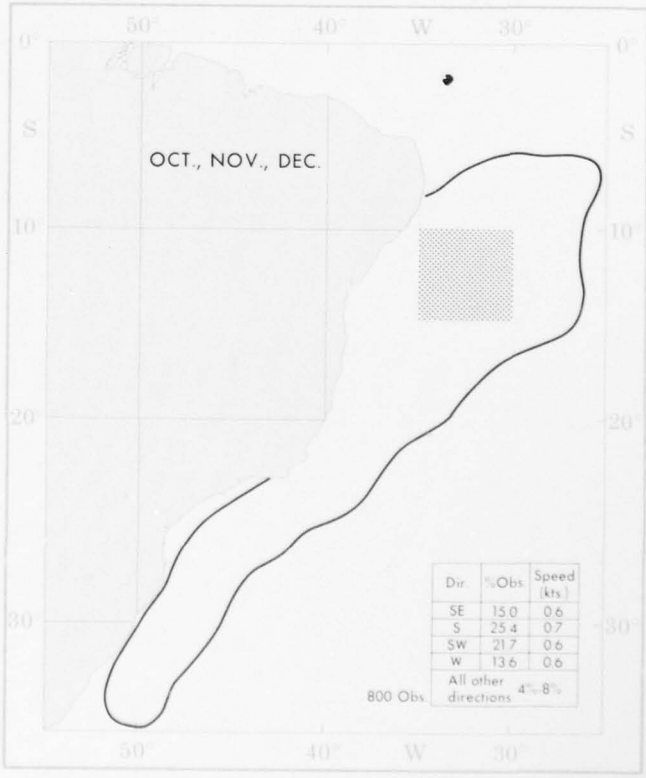
In January and February the predominant set is eastward and the South Atlantic Current exists mainly south of 30° S and between 0° and about 30° W. During these months the region of variable or indeterminate flow between the Atlantic South Equatorial Current and the South Atlantic Current appears to widen and migrate southward. The major portion of the South Atlantic Current narrows and becomes more constant with a prevailing set eastward at a mean speed of 0.7 knot and a maximum speed of 2.0 knots.

FIG. 5 MAJOR OCEANIC CURRENTS (Cont'd)

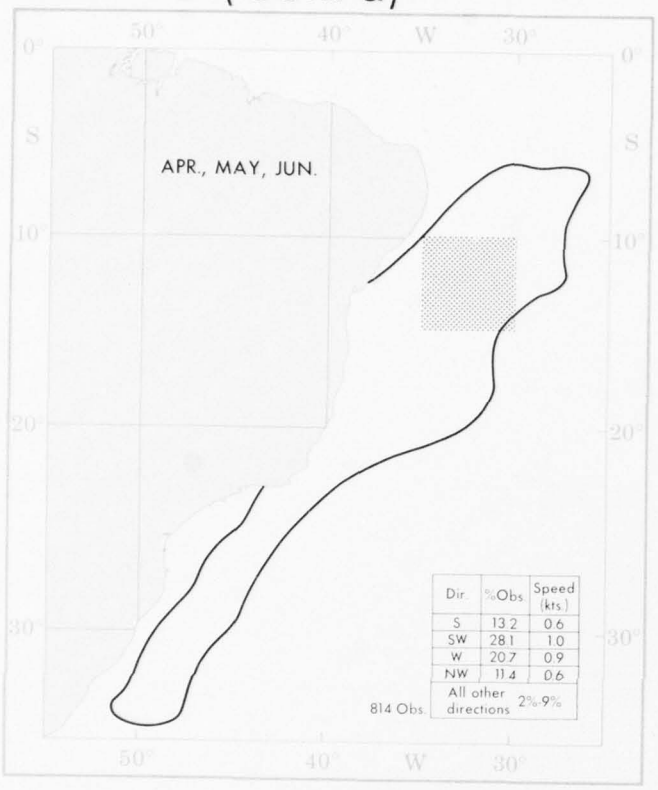




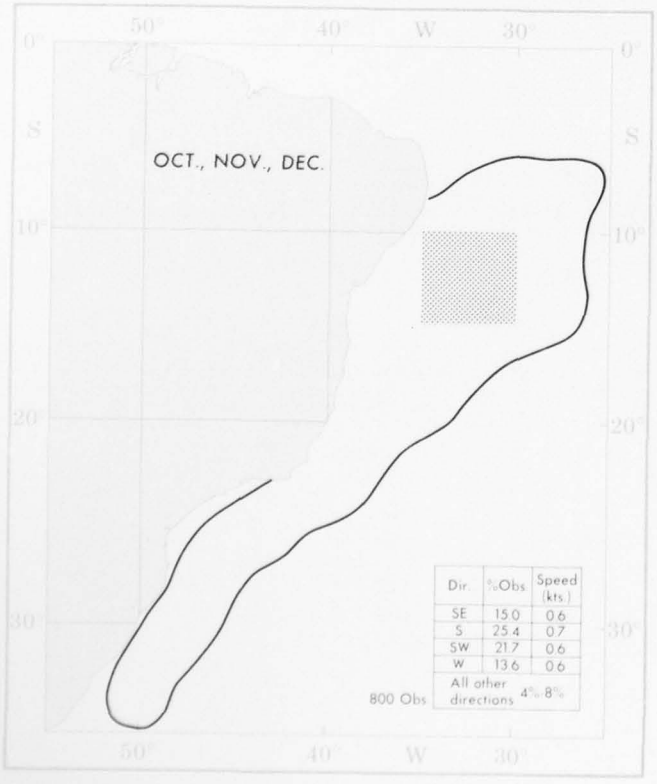




URRENTS (Cont'd)



Dir.	%Obs.	Speed (kts.)
S	13.2	0.6
SW	28.1	1.0
W	20.7	0.9
NW	11.4	0.6
All other directions	2%-9%	



Dir.	%Obs.	Speed (kts.)
SE	15.0	0.6
S	25.4	0.7
SW	21.7	0.6
W	13.6	0.6
All other directions	4%-8%	

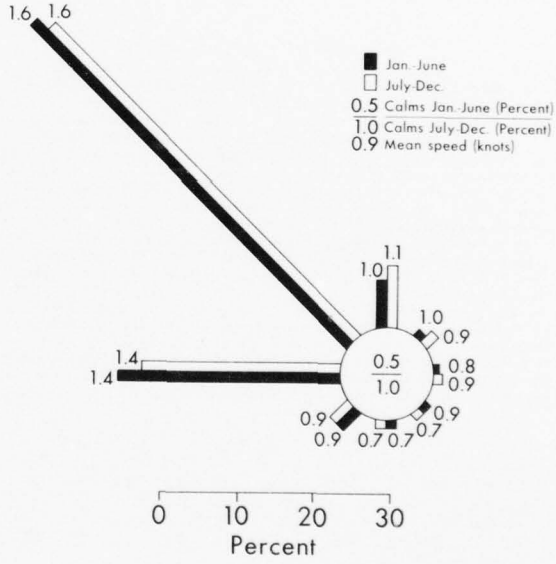
BRAZIL CURRENT

The Brazil Current is an extension of the Atlantic South Equatorial Current, which divides between latitudes 7°S and 17°S, depending on the time of year, and flows southwest parallel to the Brazil coast. Off Uruguay, at about 35° S, it meets the Falkland Current, and the two currents curve toward the east and join the South Atlantic Current.

The approximate seasonal boundaries of the Brazil Current are shown in the figures at left. The prevailing flow is south-southwest throughout the year, but the boundaries and speeds appear to change more significantly than most other major currents. The mean speed of the Brazil Current along its entire length is about 0.6 knot, and its variation in speed and direction is greater throughout the year than that of the main part of the Atlantic South Equatorial Current from which it originates.

In the southern winter (July and August), coastal countercurrents flow along the major part of the Brazil coast, even though the Brazil Current flows at greater constancy and higher speeds than at other seasons. The Brazil Current is stronger because the Atlantic South Equatorial Current is stronger during July and August, with speeds exceeding 2.5 knots off the east coast of South America. The countercurrents result from the increase in volume of seasonal river discharge of the Rio de la Plata, being augmented partly by a coastal extension of the Falkland Current.

Hourly measurements of the Brazil Current indicate many changes that can occur in the surface layer. Strong tidal characteristics are evident and the current appears to be influenced also by prevailing northerly and northeasterly winds.



GUIANA CURRENT (NORTH BRAZIL CURRENT)

The Guiana Current is a strong, persistent northwest flow along the northeast coast of South America between 5° S and 12° N that may at times attain a speed of about 4 knots. It originates mainly from part of the Atlantic South Equatorial Current that branches northwestward off Cape Natal and is augmented slightly in its northern part by the Atlantic North Equatorial Current, the weaker of the two equatorial currents in the Atlantic. The direction of the current remains constant throughout its length most of the year with a frequency of about 85 percent. Any variations are primarily in its speed as shown in the table.

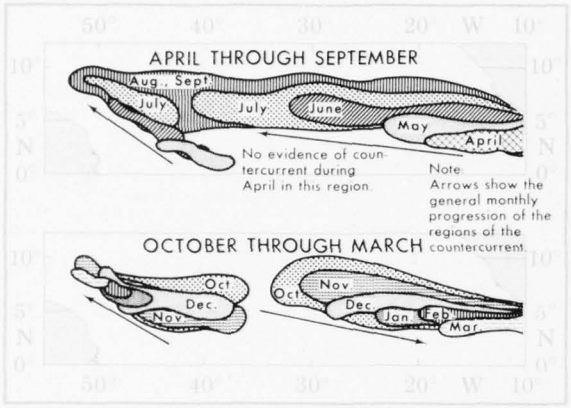
Months	Speed (knots)											Total Obs.	Dir.
	0.2	0.5	0.8	1.1	1.4	1.8	2.2	2.4	3.2	3.7	4.2		
January through June	3.8	7.8	11.9	16.0	16.9	16.7	16.2	7.4	2.1	0.9	0.3	11602	303
July through December	4.3	9.4	11.8	14.7	14.6	14.4	16.0	8.8	4.4	1.3	0.3	8714	303

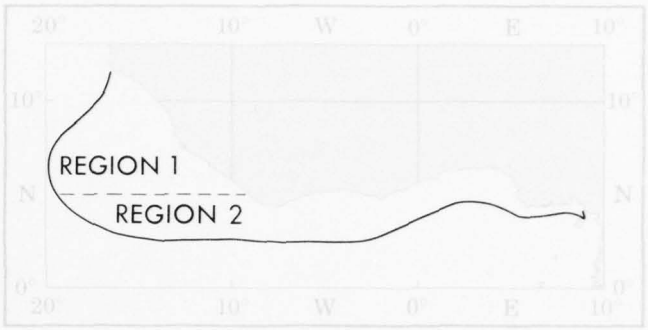
Percent frequency of prevailing NW flow by speed category

The current appears to be somewhat stronger from July through December between 0° and 7° N and from January through June between 5° S and 0° and between 7° and 12° N. Strongest speeds during the year occur between 1° and 6° N and may result partly from the considerable discharge of the Amazon River.

The surface current rose shows the prevailing flow and the slight variations during two 6-month periods for the entire length of the current.

FIG. 5 MAJOR OCEANIC CURRENTS (Cont'd)





ATLANTIC EQUATORIAL COUNTERCURRENT

The Atlantic Equatorial Countercurrent flows eastward between the west-setting Atlantic North and South Equatorial Currents. The approximate boundaries and monthly variations in extent are shown in figure above. The surface countercurrent is best defined during August and September, when it extends from about 52° to 10° W and joins the Guinea Current. In October it narrows and separates into two parts at about 7° N, 35° W. The western part, which appears to be a region where the countercurrent probably sinks and flows eastward beneath the equatorial currents, gradually diminishes in size to the west-northwest, while the eastern part diminishes to the east-southeast as shown in the lower half of the figure above. The greatest separation occurs during March; during April the western part of the countercurrent disappears, but in May it reappears in the vicinity of 0°, 40° W. The two segments progress west-northwest without too much change in size. They merge at about 6° N, 43° W during August and continue their flow eastward uninterrupted through September.

The table indicates frequencies of speeds by prevailing direction during the northern summer, when the countercurrent is most pronounced. Speeds are greater but less persistent in the western part of the countercurrent, as shown by decreasing frequency of observations to the east in the higher speed groups (1.3 to 2.5 knots) and increasing frequency to the east in the lower speed groups (0.1 to 1.2 knots). Speeds have been observed to exceed 3.0 knots at times.

Region	Prevailing Dir.	Mean Speed (Kts.)	Speed Categories (Kts.) 0.1-0.6	0.7-1.2	1.3-1.9	2.0-2.5	≥2.6	Total Freq.
West of 45° W	110	1.0	14.0	24.0	12.5	4.0	0.5	55
Between 45° and 20° W	075	0.9	21.0	26.0	10.0	2.5	0.5	60
East of 20° W	095	0.8	30.5	30.5	7.5	1.5	--	70

Percent frequency of speeds by region, northern summer (July, August, September)

GUINEA CURRENT

During the northern summer the Guinea Current begins at about 14°W as the eastern extension of the well-established Atlantic Equatorial Countercurrent. The table shows the constancy of the prevailing current within the boundaries shown in the figure.

Percent of observations by speed categories and directions during July, August, and September

Dir.	Speed (Knots) 0.2	0.5	0.8	1.1	1.4	1.8	2.2	2.7	3.2	3.7	>4.0	Mean Speed (Knots)	Frequency (Percent)
NE	2.9	4.1	4.0	1.7	2.1	1.5	0.9	0.6	0.3	0.1	--	1.0	18.2
E	3.3	8.4	8.1	7.8	6.7	5.0	3.6	1.7	0.9	0.1	0.1	1.2	45.7
SE	2.4	3.0	3.3	2.6	1.8	0.9	0.5	0.1	--	--	--	0.9	14.6

All other directions 5 percent or less

The prevailing direction is east and the mean speed 1.2 knots, the general flow is between northeast and southeast more than 75 percent of the time, with a maximum speed of about 4.0 knots. The Guinea Current appears constant in direction except from December through February, when easterly winds reduce the speed and cause the current to become variable and at times to reverse. When reversed the flow seldom exceeds 1 knot. During the northern winter (January through March), when the Atlantic Equatorial Countercurrent is not well established or has disappeared, the Guinea Current, mainly influenced by the Canary Current, widens considerably between 10° and 20° W. The figure above shows the approximate winter boundaries and the variations of the current by percent of observations in the prevailing directions, and mean speeds. The approximate seasonal migration of the southern boundary of the Guinea Current by latitude along the meridian 10° W is shown as follows:

Season	Location
Nov., Dec., Jan., Feb., Mar.	2.5° N
Apr., May, June	4.0° N
July, Aug., Sept., Oct.	3.5° N

REGION 1

Dir.	Speed Categories (Knots) 0.2	0.5	0.8	1.1	1.4	1.8	2.2	Mn. Spd.	Total %
NE									
E	5	6	3	2				0.6	16
SE	8	9	5	3	1	1	1	0.6	28
S	5	7	3	1	1			0.5	17

All other directions 6.1%

REGION 2

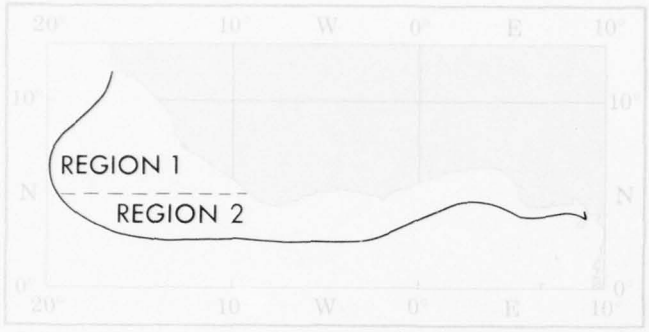
Speed Categories (Knots) 0.2	0.5	0.8	1.1	1.4	1.8	2.2	Mn. Spd.	Total %
4	5	3	2	1	1		0.7	16
5	9	9	6	4	3	1	0.9	37
4	6	5	2	1	1		0.7	19

All other directions 4.7%

CAPE HORN CURRENT

The Cape Horn Current sets continuously eastward close to the tip of South America and enters Drake Passage at about 70° W in a 150-mile-wide band, with surface speeds observed at up to 2.4 knots. The set veers north-northeast, and when it crosses longitude 65° W the current has narrowed to a width of about 85 miles and its speed has decreased considerably.

CURRENTS (Cont'd)



GUINEA CURRENT

During the northern summer the Guinea Current begins at about 14°W as the eastern extension of the well-established Atlantic Equatorial Countercurrent. The table shows the constancy of the prevailing current within the boundaries shown in the figure.

Percent of observations by speed categories and directions during July, August, and September

	Speed (Knots)											Mean Speed	Frequency
Dir	0.2	0.5	0.8	1.1	1.4	1.8	2.2	2.7	3.2	3.7	>4.0	(Knots)	(Percent)
NE	2.9	4.1	4.0	1.7	2.1	1.5	0.9	0.6	0.3	0.1	--	1.0	18.2
E	3.3	8.4	8.1	7.8	6.7	5.0	3.6	1.7	0.9	0.1	0.1	1.2	45.7
SE	2.4	3.0	3.3	2.6	1.8	0.9	0.5	0.1	--	--	--	0.9	14.6

All other directions 5 percent or less

The prevailing direction is east and the mean speed 1.2 knots; the general flow is between northeast and southeast more than 75 percent of the time, with a maximum speed of about 4.0 knots. The Guinea Current appears constant in direction except from December through February, when easterly winds reduce the speed and cause the current to become variable and at times to reverse. When reversed the flow seldom exceeds 1 knot. During the northern winter (January through March), when the Atlantic Equatorial Countercurrent is not well established or has disappeared, the Guinea Current, mainly influenced by the Canary Current, widens considerably between 10° and 20° W. The figure above shows the approximate winter boundaries and the variations of the current by percent of observations in the prevailing directions, and mean speeds. The approximate seasonal migration of the southern boundary of the Guinea Current by latitude along the meridian 10° W is shown as follows:

Season	Location
Nov., Dec., Jan., Feb., Mar.	2.5° N
Apr., May, June	4.0° N
July, Aug., Sept., Oct.	3.5° N

REGION 1

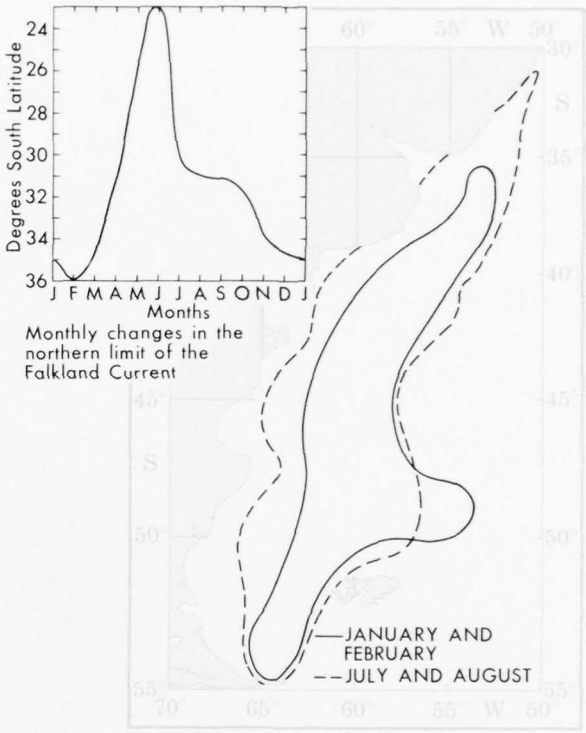
Dir	Speed Categories (Knots)								Mn. Spd	Total %
	0.2	0.5	0.8	1.1	1.4	1.8	2.2			
NE										
E	5	6	3	2					0.6	16
SE	8	9	5	3	1	1	1		0.6	28
S	5	7	3	1	1				0.5	17
All other directions 6.1%										

REGION 2

Speed Categories (Knots)								Mn. Spd	Total %
0.2	0.5	0.8	1.1	1.4	1.8	2.2			
4	5	3	2	1	1			0.7	16
5	9	9	6	4	3	1		0.9	37
4	6	5	2	1	1			0.7	19
All other directions 4.7%									

CAPE HORN CURRENT

The Cape Horn Current sets continuously eastward close to the tip of South America and enters Drake Passage at about 70° W in a 150-mile-wide band, with surface speeds observed at up to 2.4 knots. The set veers north-northeast, and when it crosses longitude 65° W the current has narrowed to a width of about 85 miles and its speed has decreased considerably.



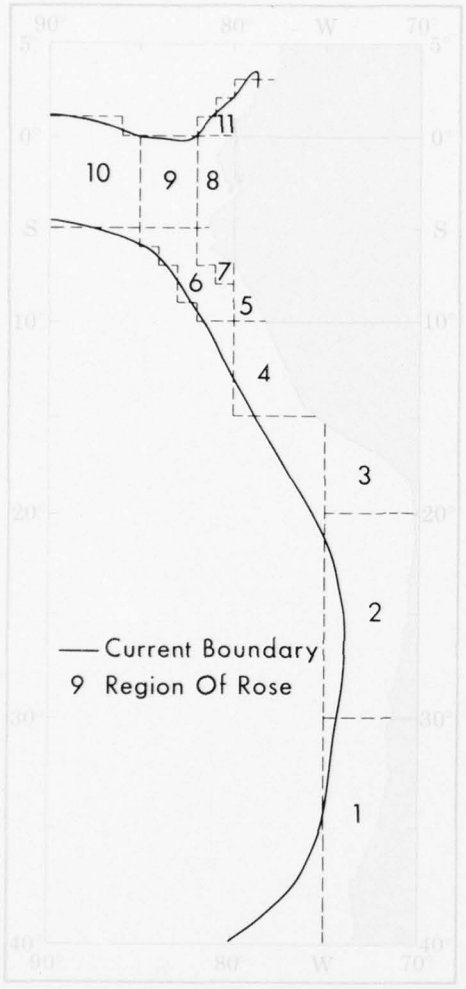
FALKLAND CURRENT (MALVIN CURRENT)

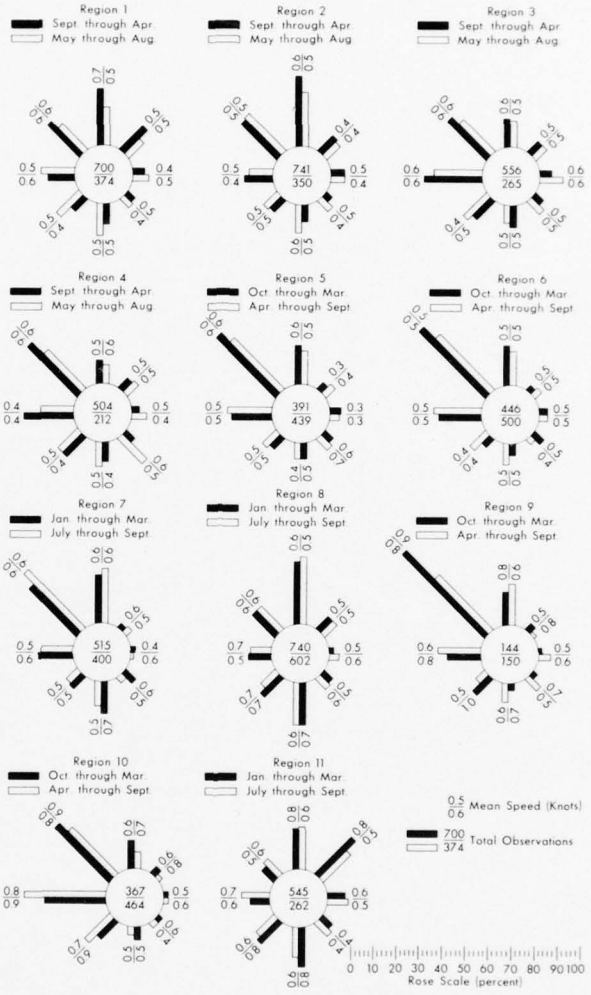
The Falkland Current originates mainly from the Cape Horn Current in the northern part of Drake Passage. After passing through the strait, the current sets north between the continent and the Falkland Islands and follows the coast of South America until it joins the Brazil Current at about 36° S near the entrance to Rio de la Plata. The figure above shows the monthly changes in the northern limit of the current northeast of the mouth of Rio de la Plata. These changes appear to result mainly from the volume of seasonal river discharge, which is greatest during May and June. During this period the river outflow has been reported to have extended a considerable distance eastward, at times as far as 37° W, or a distance of about 1,200 nautical miles.

Within 20 nautical miles of the coast, tidal currents predominate. Between 30 and 50 nautical miles from the coast the current is stronger and may reach speeds to 3 knots off headlands. However, south sets have been observed under the influence of northerly winds. Beyond 50 nautical miles of the coast, the Falkland Current usually sets north-northeast. The current has been described as easily influenced by, and changing direction with, the wind. There are, however, few storms to affect the current, and wind speeds seldom exceed 25 knots, most frequently averaging 13 knots. The constancy of the current during the northern summer in July and August is indicated by 55 percent of the observations setting 025° at a mean speed of 0.8 knot. Strongest southerly winds cause a maximum speed of about 2 knots.

Observations available during the northern winter months of January and February indicate some change in the current. Primarily, the current is narrower, the west boundary is located farther offshore throughout its length, and the northern limit appears farthest south between 35° and 36° S as shown. The constancy of the current is somewhat greater, with about 70 percent of the observations prevailing north-northeast, but the mean speed is 0.6 knot, 0.2 knot lower than that during July and August. Maximum speed during January and February is about 1.5 knots.

FIG. 5 MAJOR OCEANIC CURRENTS (Cont'd)





The West Wind Drift is the largest oc
tudes and the cold water flowing ar
The speed of the West Wind Drift in
than in the open ocean. Because of
well defined, but there is a significan

El Nino is generally identified with lar
about seven year intervals. However,
In December the northerly winds blow
current flows southward in a tongue-sh
ably in some years and influences a la
Current is diminished, the temperature
in a layer of warm water about 75 fee
The origin of this flow is not definitely
weaken; close to shore a south-setting
of the Pacific Equatorial Countercurren
The southward excursion of El Nino is
trade wind regime.

PERU CURRENT (PERU COASTAL CURRENT, HUMBOLDT CURRENT)

The Peru Current is a narrow, fairly stable current that flows northward close to the South American Pacific coast, it roughly parallels the coastline, beginning at about 40° S and flows past Chile, Peru, and Ecuador to the southwest extremity of Colombia.

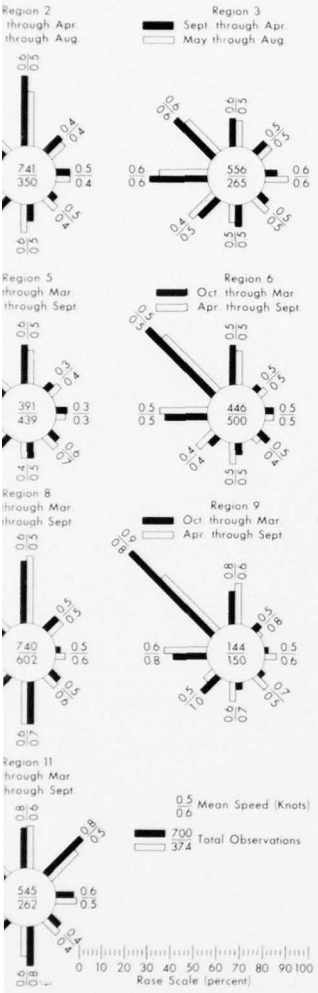
The Peru Current occupies two distinct regions, the inshore current referred to as the Peru Coastal Current, and the offshore current described as the Peru Oceanic Current. However, the distinction is made principally from the biological characteristics in the upper layers. The Peru Current shown in the figure above is based on persistence and speed. Albeit the most outstanding current in the Southern Hemisphere, the Peru Current is not very strong, having a mean speed of 0.9 knot in the northern region where the flow is most persistent.

The Peru Current originates from water of the South Pacific Current and the West Wind Drift where these flows pass into the region of the trade winds. The current follows the coast and joins the Pacific South Equatorial Current beyond 100° W.

The surface current shows a high constancy throughout the greater part of its length and is little affected by latitude or season. Seasonal variation is shown in the surface current roses in the figure above, the current tends to be more variable south of 10° S during the southern winter and north of 10° S during the southern summer. The current most frequently flows at speeds ranging between 0.2 and 1.4 knots, being strongest off the Peru coast--maximum speeds occur at its northern extremity between the continent and the Galapagos Archipelago. The currents are stronger near shore and weaken with increasing distance from shore.

In some regions, however, the current is very weak, with eddies occurring at irregular intervals; south-setting countercurrents frequently flow close to shore. Because of the moderate speed and variability of the Peru Current, its exact west boundary is difficult to determine. West of the Peru Current the flow is also markedly northward, and there is no sudden change between the coastal zone of more persistent flow and the oceanic region of less stable or weaker flow.

URRENTS (Cont'd)



WEST WIND DRIFT (GREAT EASTWARD DRIFT)

The West Wind Drift is the largest ocean current on earth. In the Southern Hemishere, it is a barrier between the warm water of the lower latitudes and the cold water flowing around the Antarctic.

The speed of the West Wind Drift increases considerably toward Drake Passage, where it averages up to 0.7 knot, or about three times faster than in the open ocean. Because of variations in the strength of the wind, the northern boundary of the West Wind Drift at about 40° S is not well defined, but there is a significant flow toward the northeast and north where it joins the east-setting South Atlantic Current.

EL NINO

El Nino is generally identified with large-scale disturbances which occur in the northern part of the Peru Current in certain years, reportedly at about seven year intervals. However, El Nino is an event which has been observed in late December quite frequently.

In December the northerly winds blowing across Central America drive water from the Gulf of Panama southward along the Peru coast. This current flows southward in a tongue-shaped band 1 to 2 miles wide between 3° and 6° S. The intensity of this phenomenon increases considerably in some years and influences a larger part of the northern nearshore portion of the Peru Current than usual. During such periods the Peru Current is diminished, the temperature of the surface water rises sharply, and the southward flow extends as far as 20° S. This condition results in a layer of warm water about 75 feet deep and as wide as 20 miles.

The origin of this flow is not definitely known, but northwesterly winds that penetrate farther south than usual do cause the Peru Current to weaken; close to shore a south-setting flow develops as the cool Peru Current is replaced by warm water with characteristics similar to those of the Pacific Equatorial Countercurrent.

The southward excursion of El Nino is most prevalent January through March, after which it is halted by the reappearance of the southeasterly trade wind regime.

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